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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1979-1978-1977

ELECTRIC, GAS, TELEPHONE
WATER AND HEATING UTILITIES

PUBLIC SERVICE COMMISSION OF WISCONSIN

Accounts and Finance Division

Bulletin No. 8
November, 1980

STATISTICS OF WISCONSIN PUBLIC UTILITIES

1979-1978-1977

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

This bulletin presents a statistical summary of public utilities operating in Wisconsin during the period 1979-1977 inclusive. In addition, selected data over longer periods are shown in the text or portrayed in the charts. Some Wisconsin utilities have operations outside the State. These operations are generally excluded from the summaries but this was not possible in the case of financial data shown in Tables 1, 2, and 3.

The following table gives an indication of the relative importance of various utility services included in the report.

	Year Ending December 31, 1979		
	Average Number of Customers*#	Operating Revenues*	Net Operating Revenues*
Electric	1,790,054	$1,568,584,456	$235,532,102
Gas	1,008,328	985,432,366	54,184,124
Telephone	1,897,686	876,813,960	173,[illegible],634
Water	909,579	107,671,624	13,686,472
Heating	753	8,995,665	733,624
	5,606,400	$3,547,498,071	$477,461,956

* Excludes out-of-state operations.
\# Ultimate consumers.

Chart 1 presents a comparison of trends in gross operating revenue since 1970. Gas utility revenues continue to have the greatest rate of growth with an increase of 3.7 times in 9 years. Electric and telephone revenues increased 3.1 and 2.7 times respectively while water revenues rose 1.8 times during the 9-year period. The increases are due to both increased numbers of customers and to higher rates.

Chart 2 shows that since 1970, net operating telephone revenues have risen 3.2 times, electric revenues 2.6 times, water revenues 1.7 times, and gas revenues 1.6 times.

CHART 1
COMPARATIVE TRENDS OF OPERATING REVENUES

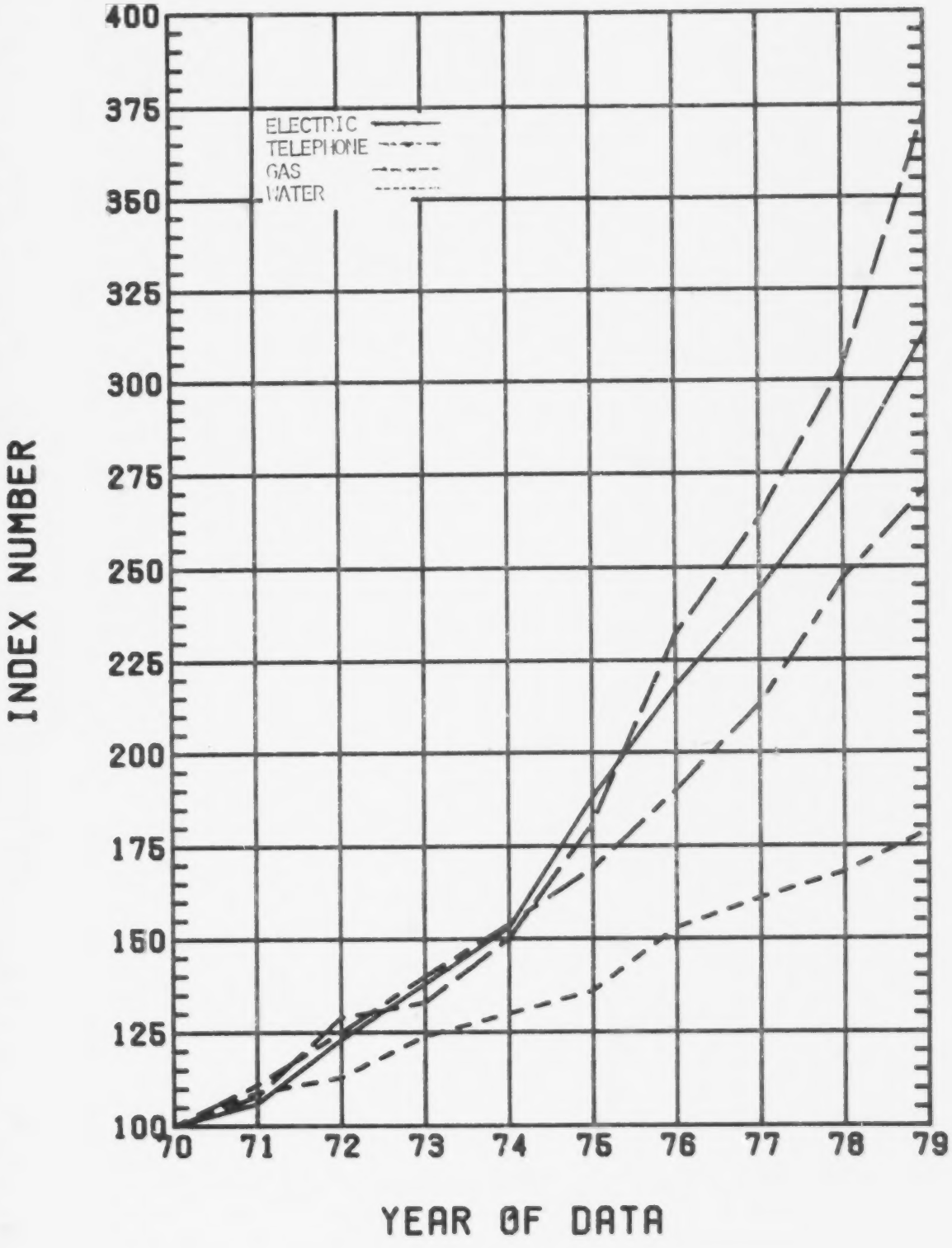
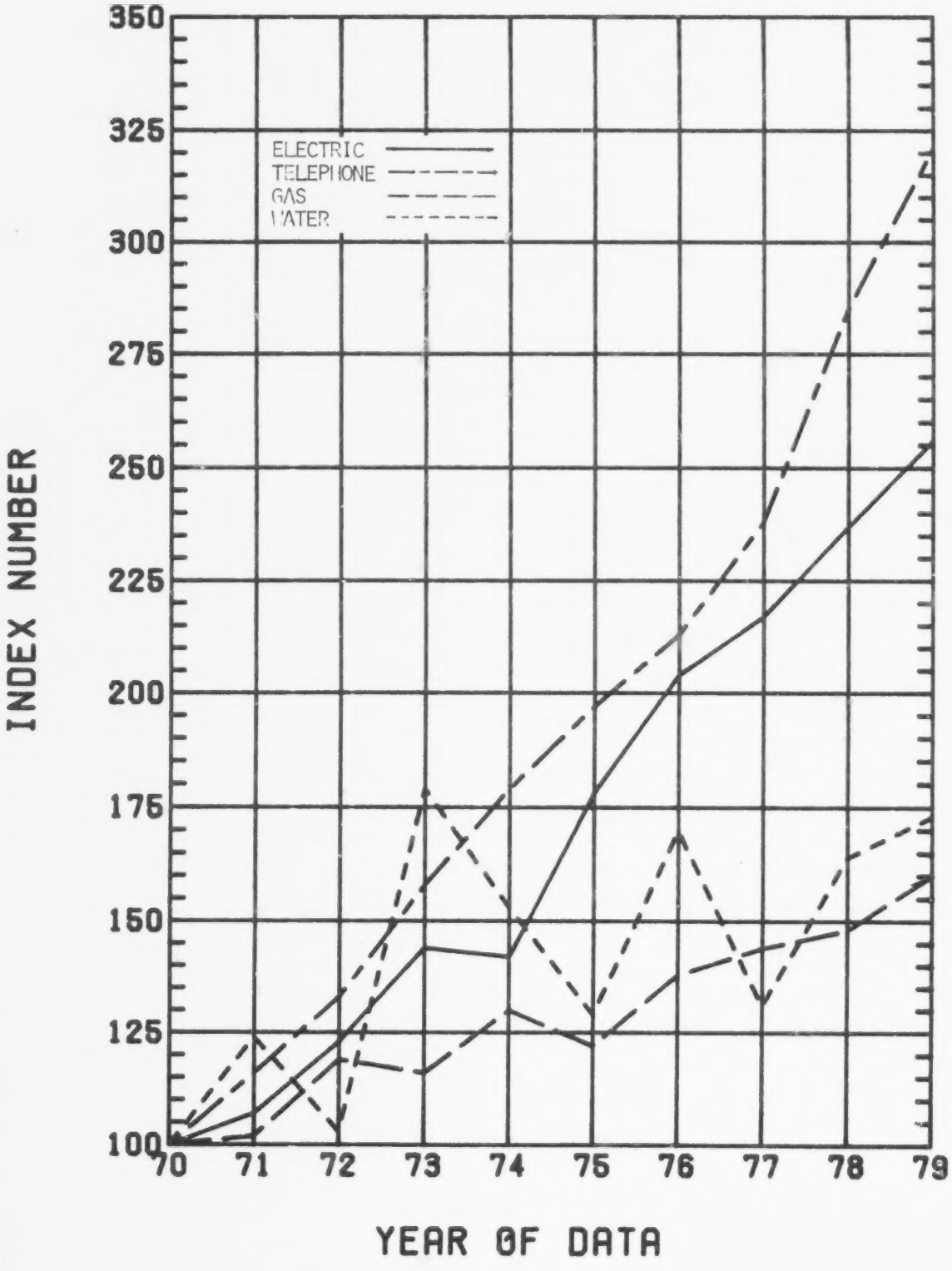


CHART 2
COMPARATIVE TRENDS OF NET OPERATING REVENUES



The number of public utilities operating in the State as of December 31, 1979 is summarized below. These figures include all utilities regardless of size.

	Total	Private	Municipal
Electric	99	14	85
Gas	16	15	1
Telephone	125	125*	0
Water	538	16	522
Heating	3	2	1
Total	781	172	609

* Includes 2 roadway companies and twelve radio-telephone service companies. Does not include two Illinois based utilities that serve a few customers in Wisconsin.

FINANCIAL STATISTICS

Statistics on plant investment, capitalization and disposition of income are presented in this section of the bulletin. These data necessarily include all operations of Wisconsin utilities, including out-of-state operations of those utilities operating in neighboring states.

A number of municipalities include nonutility sewer operations in their water utility reports. Figures on income and capitalization reflect these operations when reported. It is to be emphasized, however, that sewer coverage presented herein is by no means complete since many municipalities operate their non-utility sewer departments independently and do not report those operations.

Utility Plant in Service and Accumulated Provisions for Depreciation

Table 1 presents a summary of utility plant in service and accumulated provisions for depreciation of Wisconsin utilities during the period from 1977 through 1979. Charts 3, 4 and 5 show similar data in graphic form over the past 10 years.

About $8.8 billion are invested in utility plant by Wisconsin utilities. Of this amount, electric plant makes up 48.1% with telephone, water and gas plant amounting to 30.1%, 10.4% and 10.0% respectively. Sewer and heating plant make up another 1.4%.

Electric cooperatives and companies engaged in intrastate transmission of natural gas do not fall under the jurisdiction of the Wisconsin Public Service Commission and therefore, data covering these companies are not included in this study. Electric cooperatives did have gross plant investment in Wisconsin of about $543 million as of December 31, 1979. Gas pipeline companies had about $222.2 million in gross plant as of the same date.

Except for water and sewer service, public utility operations in Wisconsin are predominately under private management. For example, municipalities own and operate 98% of the total water plant but only 4% of the electric plant, about 0.05% of the gas distribution plant and no telephone plant.

As of December 31, 1979, Wisconsin electric utilities had accumulated provisions for depreciation equal to 36% of electric plant in service. Telephone utilities had accumulated 22%, water utilities 20% and gas utilities 35%. The comparable figures in 1970 were 29%, 24%, 19% and 19% respectively.

Charts 3, 4 and 5 show that utility plant in service has increased steadily over the past 9 years. Electric utility plant has increased 121% since 1970. Telephone plant is up 132% while water and gas plant increased 72% and 50% for the period.

Capitalization

Capitalization of public utilities in Wisconsin is summarized in Table 2 and Charts 6 and 7. Total capitalization was about $6,145 million in 1979. Of that amount 82% was accounted for by private utilities with the remaining 18% being municipal investment.

Total capitalization was up 5% over 1978, and 73% over the past 9 years. The corresponding figures are 4% and 72% for private utilities and 7% and 78% for municipals. Charts 6 and 7 give graphic representation of these figures.

CHART 3

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION

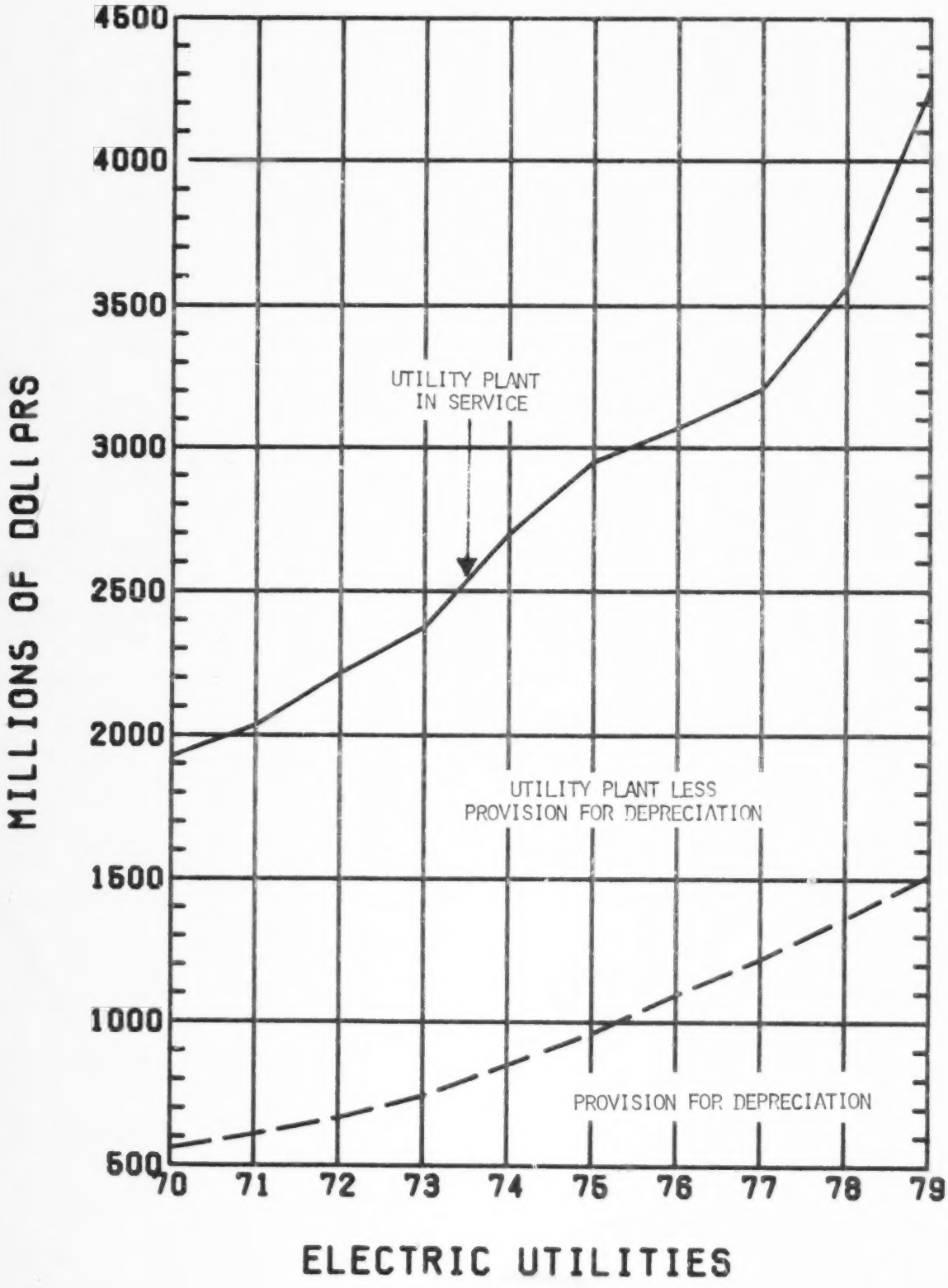


CHART 4

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION

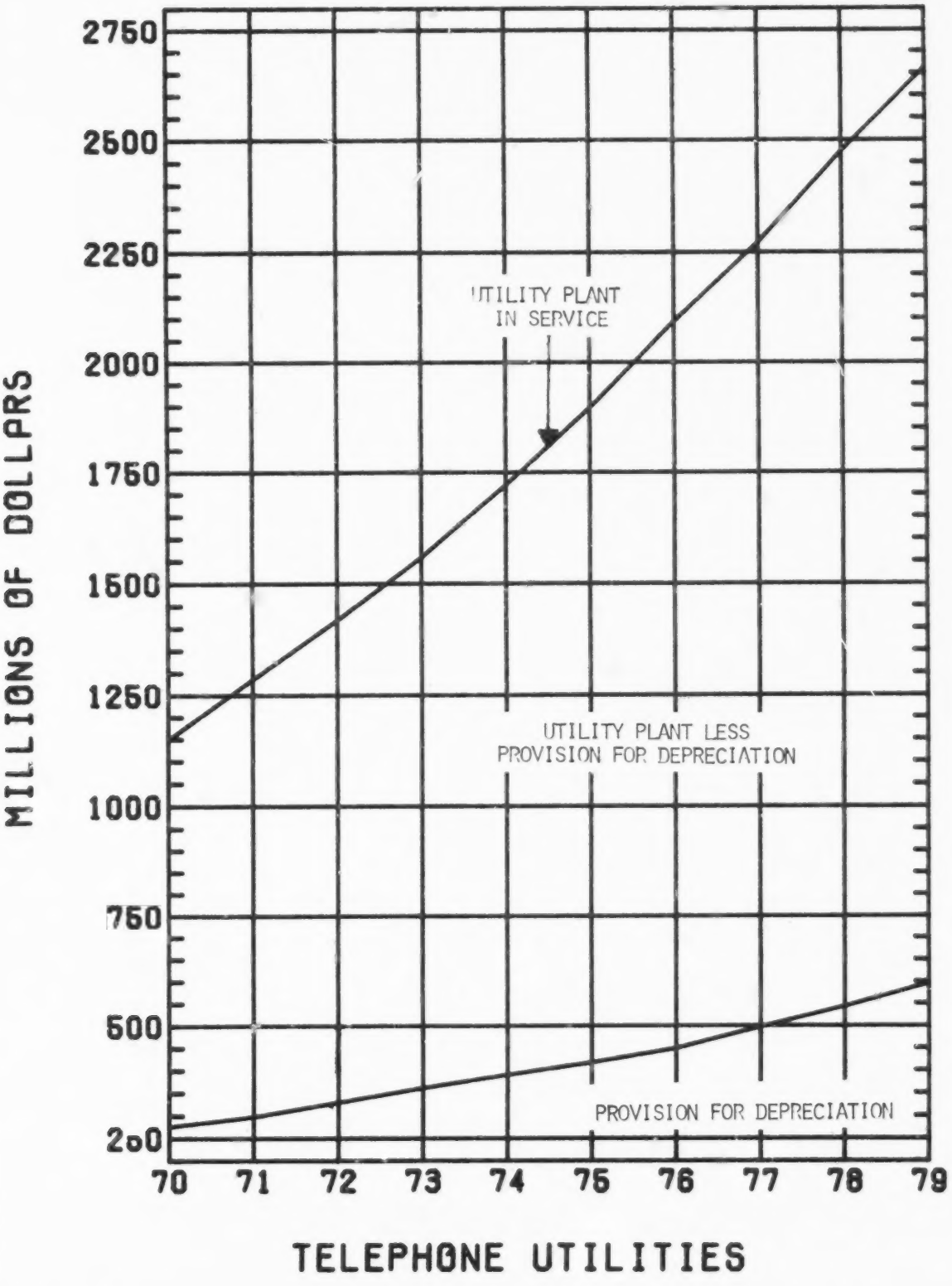
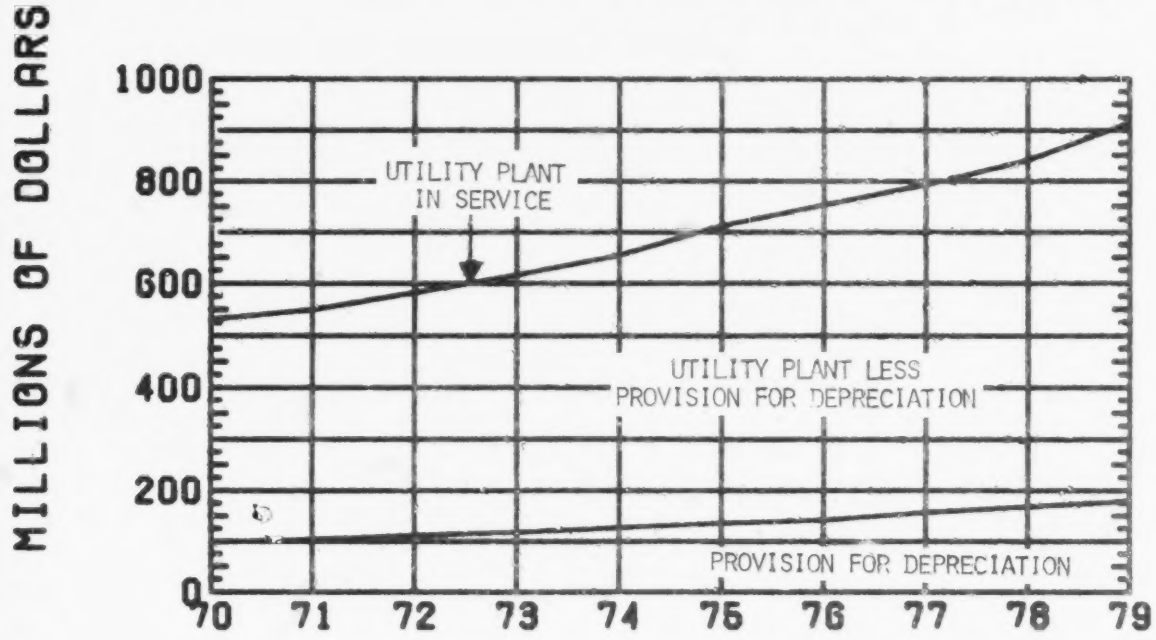
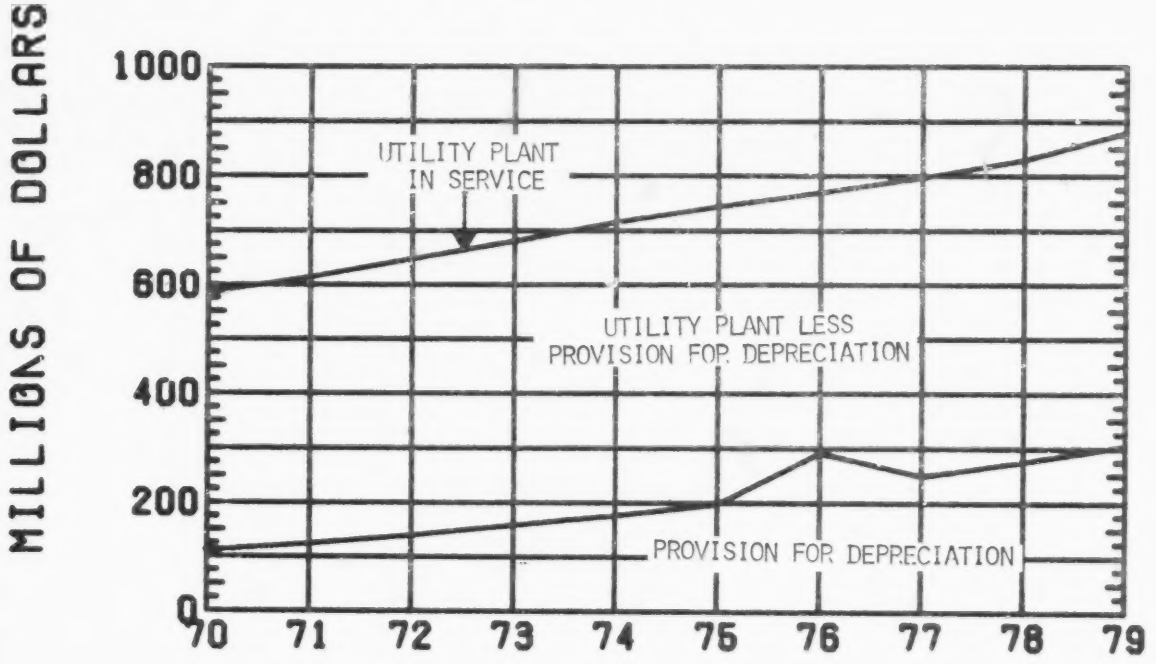


CHART 6

UTILITY PLANT IN SERVICE AND ACCUMULATED PROVISION FOR DEPRECIATION



WATER UTILITIES



GAS UTILITIES

CHART 6
CAPITALIZATION OF PRIVATE UTILITIES OPERATING IN WISCONSIN

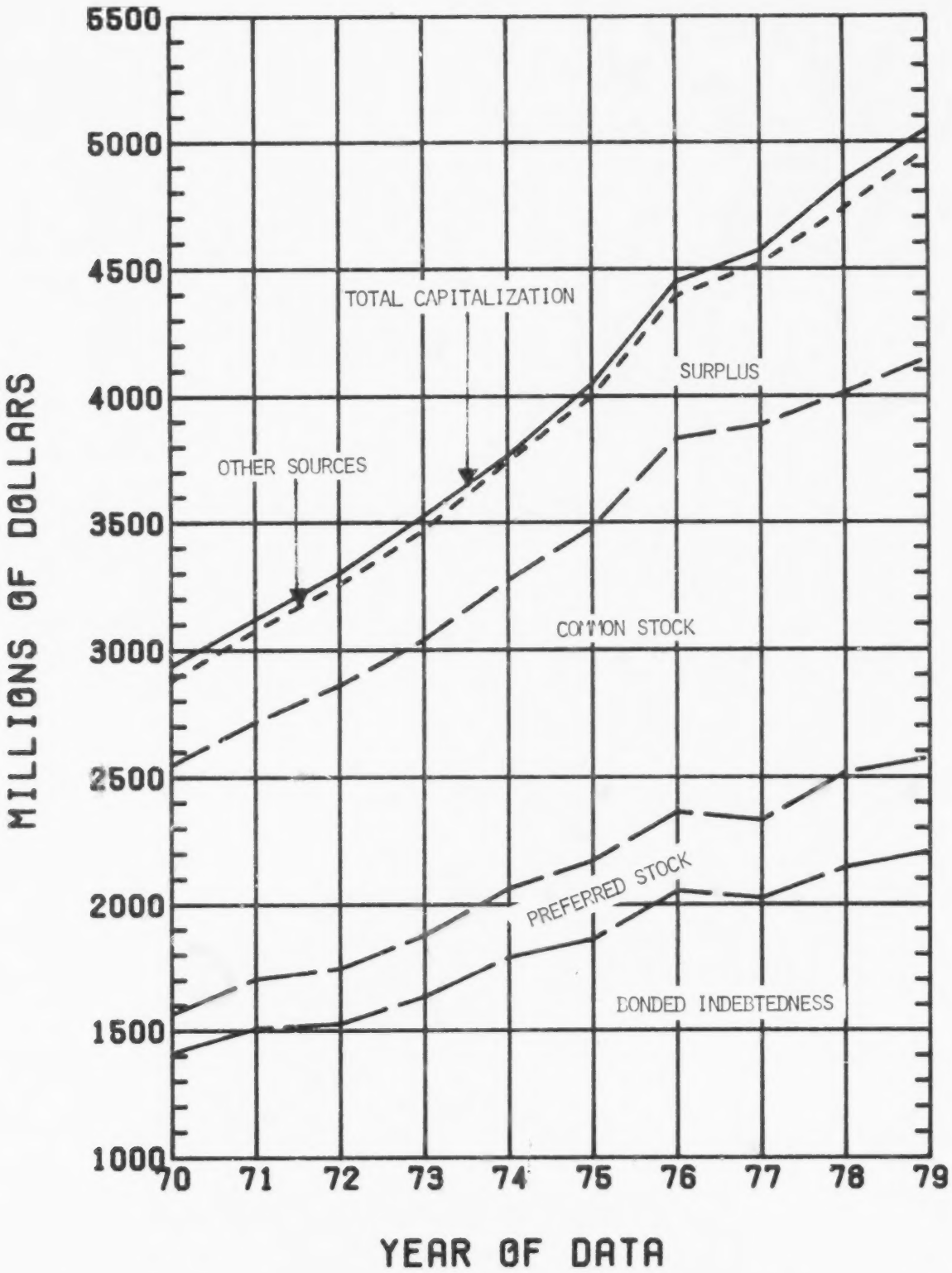


CHART 7
CAPITALIZATION OF MUNICIPAL PUBLIC UTILITIES OPERATING IN WISCONSIN

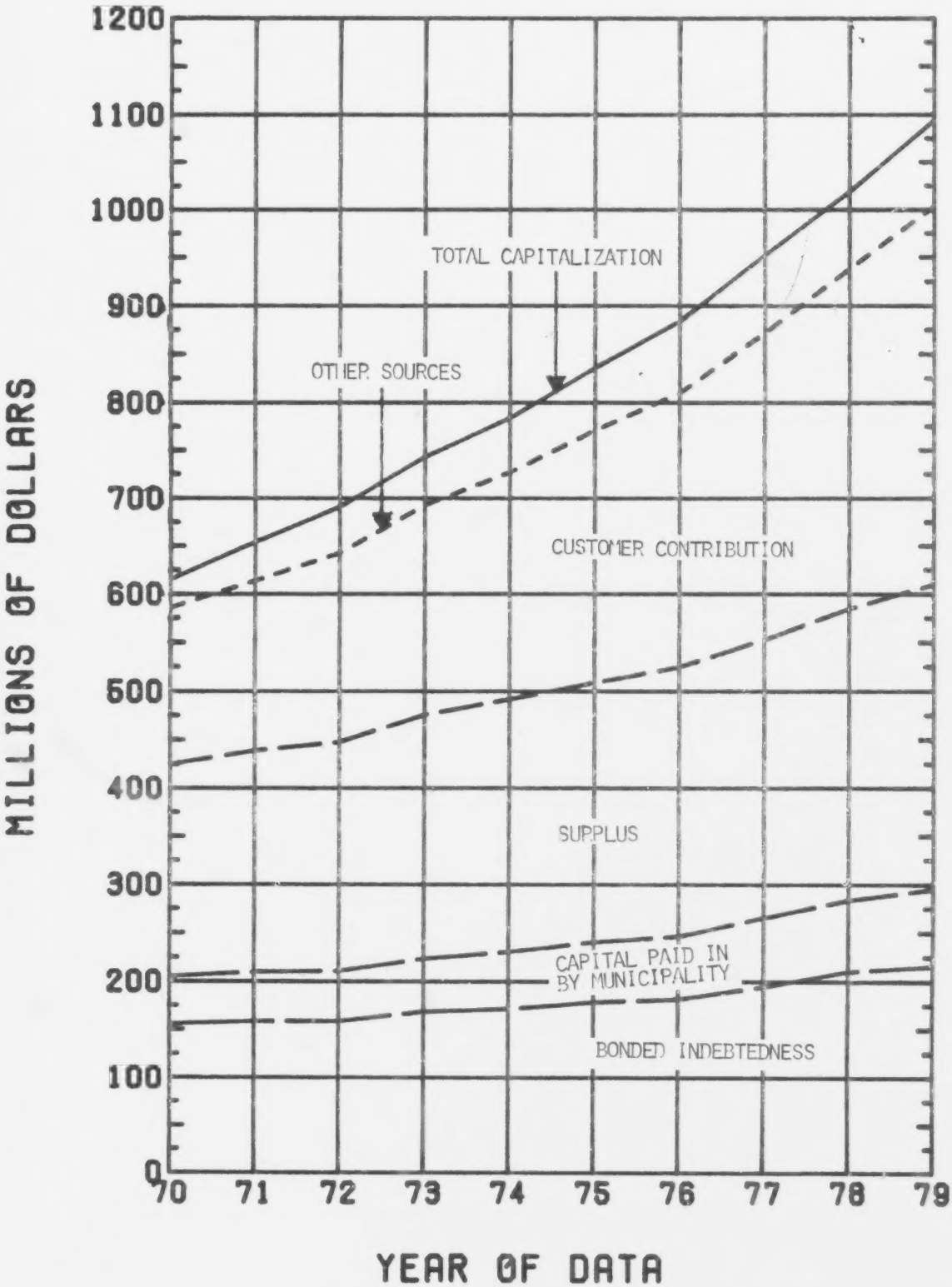


Chart 6 further shows bonds and common stock continue to be the largest source of capital for private utilities. Surplus also contributes a substantial share of total capitalization.

As shown below, Contributions in Aid of Construction is the largest item of municipal utility Capitalization. Surplus and Bonded Debt are next in size. Capital Paid in by Municipalities was only about 7.2% of the total at the end of 1979.

A comparison of the capitalization of private and municipal utilities as of December 31, 1979 is presented below:

	Private Utilities	Municipal Utilities
Bonded Indebtedness	43.8%	19.7%
Common Stock or Capital Paid in by Municipality	31.2	7.2
Preferred Stock	7.2	0.0
Surplus	16.2	28.8
Advances from Affiliates or Municipalities	0.3	8.1
Contributions in Aid of Construction	1.1	35.9
Customer Advances in Aid of Construction	0.2	0.3
Total	100.0%	100.0%

Disposition of Income

The term "gross income" as used here, is a net figure representing total income available to meet interest payments, dividends and similar items. The disposition of gross income is summarized in Table 3 and Charts 8 and 9.

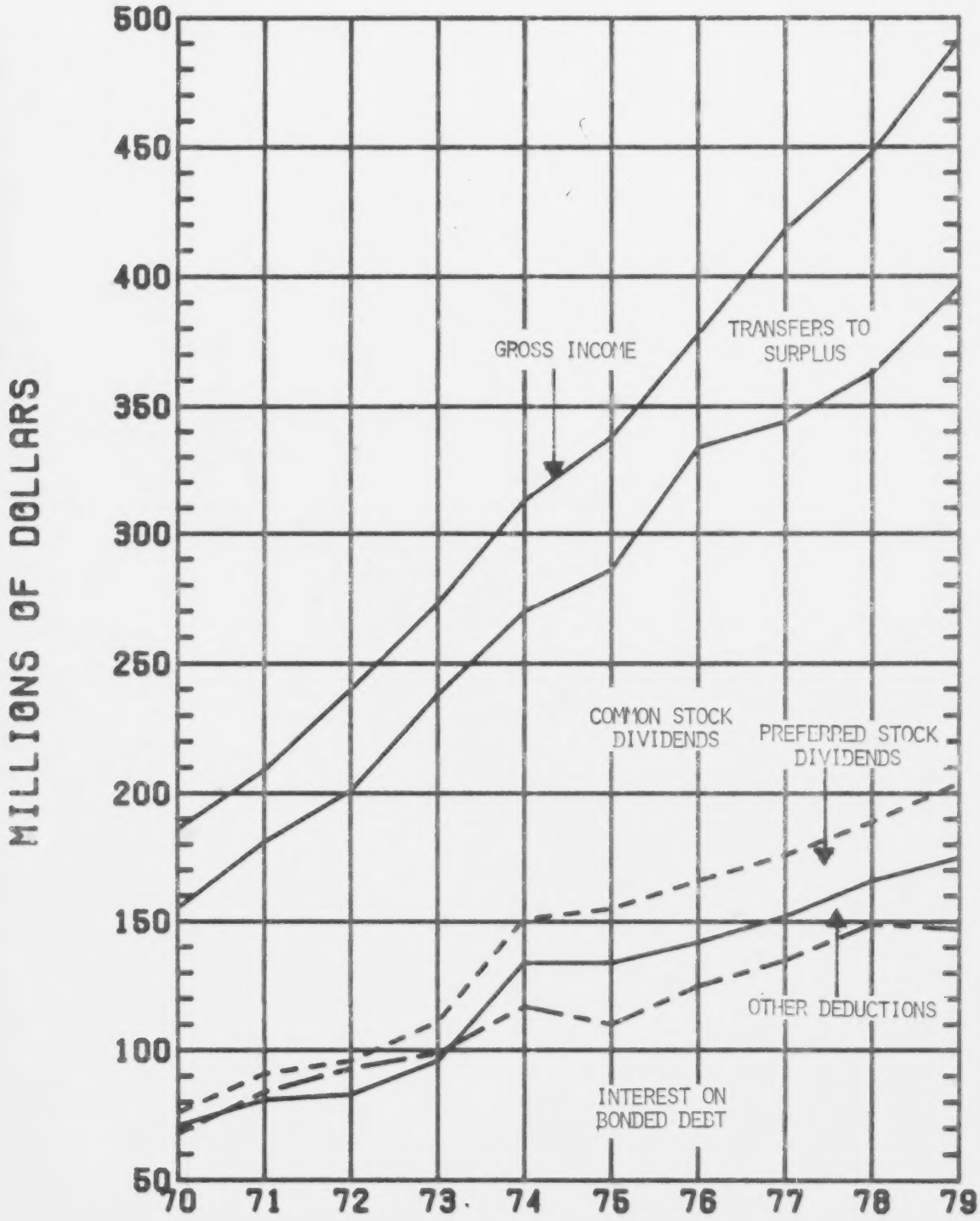
Total gross income of private utilities in Wisconsin totaled $490.7 million in 1979, 9% above the preceding year. Interest and related deductions absorbed $175.1 million, preferred stock dividends $28.9 million, dividends on common stock $191.8 million, and $94.9 million were carried to surplus.

Municipal utilities had $27.6 million in gross income in 1979, up 11% from the preceding year. Interest and related charges amounted to $13.9 million, $1.8 million were appropriated to municipalities, and $11.8 million were carried to surplus.

Payments during 1979 on each class of security or equity, expressed as a percent of average book values at the beginning and close of the year are compared below:

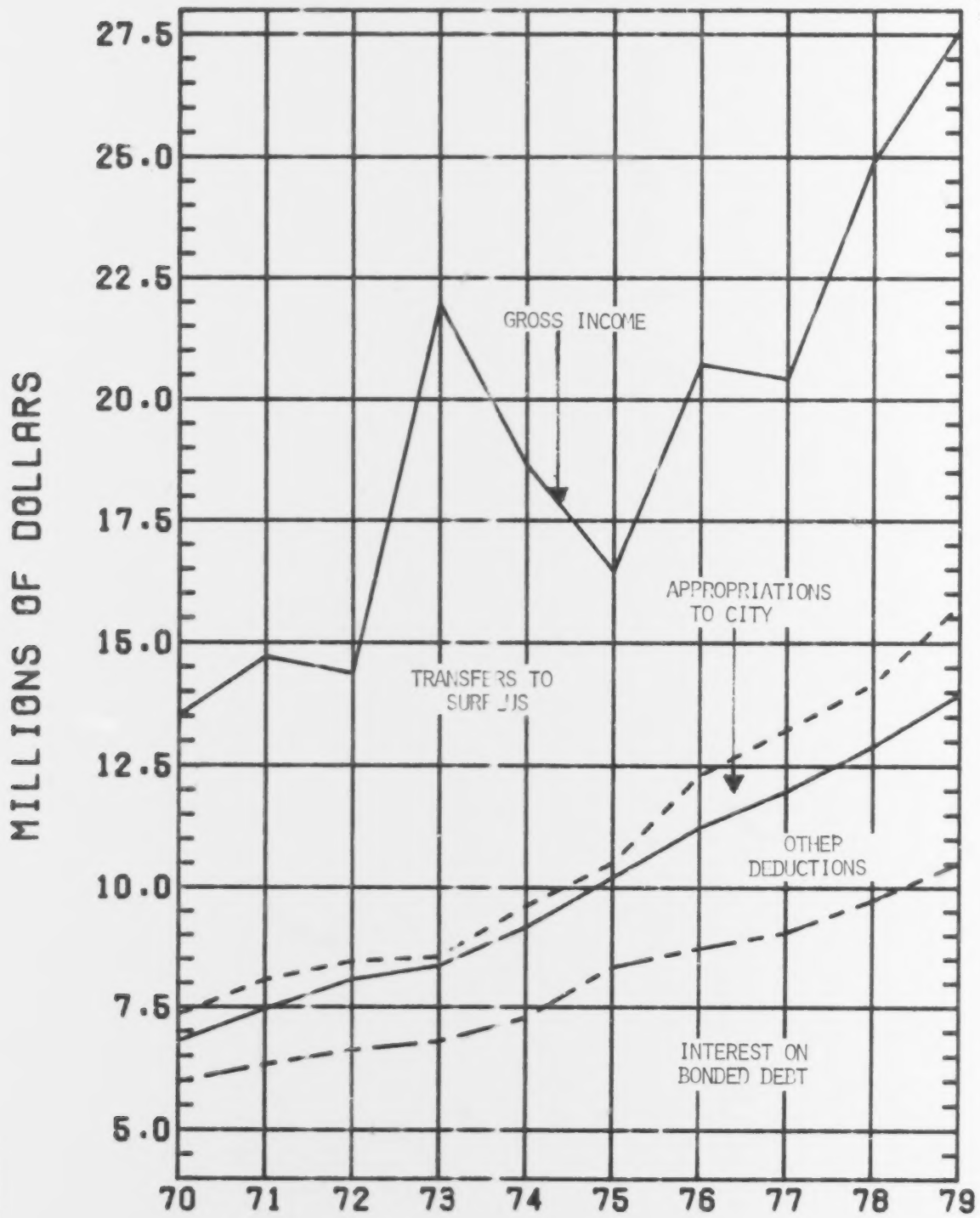
	Private Utilities	Municipal Utilities
Interest on Long-Term Debt Divided by Long-Term Debt	6.73%	4.93%
Preferred Stock Dividends Divided by Preferred Stocks	7.83	0.00
Common Stock Dividends Divided by Common Stock	12.48	0.00
Appropriations to City Divided by Capital Paid in by Municipality	0.00	2.36
Common Stock Dividends Divided by Common Stock Plus Surplus	8.32	0.00
Appropriations to City Divided by Capital Paid in by Municipality Plus Surplus	0.00	0.47

CHART 8 - DISPOSITION OF GROSS INCOME** PRIVATE PUBLIC UTILITIES OPERATING IN WISCONSIN



**INCOME AVAILIABLE FOR INTEREST AND DIVIDENDS

CHART 9 - DISPOSITION OF GROSS INCOME** MUNICIPAL PUBLIC UTILITIES OPERATING IN WISCONSIN



**INCOME AVAILIABLE FOR INTEREST AND APPROPRIATIONS TO CITY.

TABLE 1

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

	Dec. 31, 1979	Dec. 31, 1978	Dec. 31, 1977
All Utilities			
Utility Plant in Service 2/ 3/			
Electric	$4,254,127,955	$3,567,611,381	$3,208,316,971
Gas	879,876,136	829,937,324	797,191,069
Water	915,212,217	842,024,617	794,399,057
Sewer	110,696,628 4/	139,043,139	113,908,880
Telephone	2,662,188,913	2,475,385,526	2,271,330,791
Heating	17,971,817	17,543,271	17,448,938
Total	$8,840,073,666	$7,871,545,258	$7,202,595,706
Accumulated Provision for Depreciation 2/ 3/			
Electric	$1,513,644,454	$1,362,514,223	$1,220,793,093
Gas	304,607,302	276,393,987	249,124,962
Water	180,006,811	168,558,573	157,643,345
Sewer	18,470,700 4/	21,572,789	17,549,422
Telephone	595,509,847	544,022,550	498,390,297
Heating	7,767,886	7,203,741	6,613,873
Total	$2,620,007,000	$2,380,265,863	$2,150,114,992
Utility Plant Less Provision for Depreciation 2/ 3/			
Electric	$2,740,483,501	$2,205,097,158	$1,987,523,878
Gas	575,268,834	553,543,337	548,066,107
Water	735,205,406	673,466,044	636,755,712
Sewer	92,225,928 4/	117,470,350	96,359,458
Telephone	2,066,679,066	1,931,362,976	1,772,940,494
Heating	10,203,931	10,339,530	10,835,065
Total	$6,220,066,666	$5,491,279,395	$5,052,480,714
Private Utilities			
Utility Plant in Service 2/ 3/			
Electric	$4,069,842,967	$3,398,758,346	$3,050,011,968
Gas	879,432,080	829,495,543	796,751,142
Water	17,325,861	16,198,141	15,264,971
Sewer	465,887	145,897	145,897
Telephone	2,662,188,913	2,475,385,526	2,271,330,791
Heating	17,883,708	17,455,529	17,364,054
Total	$7,647,139,416	$6,737,438,982	$6,150,868,823

TABLE 1 (Concluded)

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

	Dec. 31, 1979	Dec. 31, 1978	Dec. 31, 1977
Private Utilities (Cont.)			
Accumulated Provision for Depreciation 2/ 3/			
Electric	$1,436,356,292	$1,290,420,497	$1,153,586,635
Gas	304,468,228	276,268,544	249,012,885
Water	4,211,221	3,978,477	3,787,030
Sewer	166,390	46,198	43,553
Telephone	595,509,847	544,022,550	498,390,297
Heating	7,714,421	7,152,523	6,564,343
Total	$2,348,426,399	$2,121,888,789	$1,911,384,743
Utility Plant Less Provision for Depreciation 2/ 3/			
Electric	$2,633,486,675	$2,108,337,849	$1,896,425,333
Gas	574,963,852	553,226,999	547,738,257
Water	13,114,640	12,219,664	11,477,941
Sewer	299,497	99,699	102,344
Telephone	2,066,679,066	1,931,362,976	1,772,940,494
Heating	10,169,287	10,303,006	10,799,711
Total	$5,298,713,017	$4,615,550,193	$4,239,484,080
Municipal Utilities			
Utility Plant in Service 2/			
Electric	$ 184,284,988	$ 168,853,035	$ 158,305,003
Gas	444,056	441,781	439,927
Water	897,886,356	825,826,476	779,134,086
Sewer	110,230,741	138,897,242	113,762,983
Heating	88,109	87,742	84,884
Total	$1,192,934,250	$1,134,106,276	$1,051,726,883
Accumulated Provision for Depreciation 2/			
Electric	$ 77,288,162	$ 72,093,726	$ 67,206,458
Gas	139,074	125,443	112,077
Water	175,795,590	164,580,096	153,856,315
Sewer	18,304,310	21,526,591	17,505,869
Heating	53,465	51,218	49,530
Total	$ 271,580,601	$ 258,377,074	$ 238,730,249
Utility Plant Less Provision for Depreciation 2/			
Electric	$ 106,996,826	$ 96,759,309	$ 91,098,545
Gas	304,982	316,338	327,850
Water	722,090,766	661,246,380	625,277,771
Sewer	91,926,431	117,370,651	96,257,114
Heating	34,644	36,524	35,354
Total	$ 921,353,649	$ 875,729,202	$ 812,996,634

1/ Total plant includes out-of-state properties.
2/ Including apportionment of common property.
3/ Excluding utility plant leased to others.
4/ The decline in sewer plant and its associated reserve for depreciation are due to the elimination of nonutility operations from data and not from any reduction in sewer plant

''ABLE 2

COMPARATIVE STATEMENT OF CAPITALIZATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

	Dec. 31, 1979	Dec. 31, 1978	Dec. 31, 1977
All Utilities			
Long-Term Debt Outstanding	$2,426,162,773	$2,358,745,414	$2,220,306,328
Advances from Affiliates or Municipality	103,638,993	129,362,262	86,737,296
Preferred Stock Outstanding	366,370,700	371,651,350	306,588,580
Common Stock Outstanding and Related Accounts	1,575,588,016	1,497,700,071	1,555,907,131
Capital Paid in by Municipality	78,840,333	73,445,944	70,558,861
Surplus	1,131,215,154	1,022,140,385	921,110,127
Customers' Advances in Aid of Construction	13,338,871	12,666,330	9,513,686
Contributions in Aid of Construction	449,474,979	399,055,753	356,441,045
Total	$6,144,629,819	$5,864,767,509	$5,527,163,054
Private Utilities			
Long-Term Debt Outstanding	$2,210,622,196	$2,147,247,883	$2,025,702,579
Advances from Affiliates	15,074,961	50,653,761	9,567,400
Preferred Stock Outstanding	366,370,700	371,651,350	306,588,580
Common Stock Outstanding and Related Accounts	1,575,588,016	1,497,700,071	1,555,907,131
Surplus	816,102,266	721,397,901	633,701,039
Customers' Advances in Aid of Construction	10,517,697	9,876,930	6,877,815
Contributions in Aid of Construction	56,617,452	45,873,657	37,572,623
Total	$5,050,893,288	$4,844,401,553	$4,575,917,167
Municipal Utilities			
Long-Term Debt Outstanding	$ 215,540,577	$ 211,497,531	$ 194,603,749
Advances from Municipality	88,564,032	78,708,501	77,169,896
Capital Paid in by Municipality	78,840,333	73,445,944	70,558,861
Surplus	315,112,888	300,742,484	287,409,088
Customers' Advances in Aid of Construction	2,821,174	2,789,400	2,635,871
Contributions in Aid of Construction	392,857,527	353,182,096	318,868,422
Total	$1,093,736,531	$1,020,365,956	$ 951,245,887

1/ These data necessarily represent total company figures. A few companies operate outside of Wisconsin. Electric, gas, water, sewer, heating and telephone utilities are included.

TABLE 3

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

All Utilities	1979	1978	1977
Net Operating Revenues			
Electric	$ 239,124,090	$ 221,967,878	$ 205,199,389
Gas	54,464,316	50,397,414	49,136,071
Telephone	173,325,634	154,213,433	128,866,261
Water	13,686,472	12,962,204	10,353,980
Sewer	46,360	22,651	(345,038)
Steam and Hot Water Heating	733,624	1,194,067	880,382
Total	$ 481,380,496	$ 440,757,647	$ 394,091,045
Income from Plant Leased to Others	$ 56,986	$ 345,362	$ 497,172
Income from Merchandising and Jobbing	145,333	149,548	157,366
Other Income - Net	36,731,231	31,916,913	43,741,833
Gross Income	$ 518,314,046	$ 473,169,470	$ 438,487,416
Interest on Long-Term Debt	$ 157,075,416	$ 158,495,127	$ 143,811,962
Amortization of Debt Discount and Premium	1,278,554	1,330,159	1,754,809
Interest on Debt to Associated Companies or City	2,775,076	6,527,567	5,374,366
Other Deductions	27,993,021	12,092,343	13,328,344
Net Income	$ 329,191,979	$ 294,724,274	$ 274,217,935
Dividend Appropriations on Preferred Stock	$ 28,877,470	$ 23,777,320	$ 23,917,095
Dividend Appropriations on Common Stock 2/	191,824,432	173,460,866	167,913,095
Appropriations to City	1,796,811	1,257,307	1,248,834
Balance Transferred to Surplus	$ 106,693,266	$ 96,228,781	$ 81,138,911

(Continued)

TABLE 3 (Continued)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

	1979	1978	1977
Private Utilities			
Net Operating Revenues			
Electric	$ 234,124,198	$ 217,085,172	$ 199,762,479
Gas	54,439,925	50,371,130	49,100,804
Telephone	173,325,634	154,213,433	128,866,261
Water	542,326	642,974	545,329
Sewer	1,361	(2,952)	(14)
Steam and Hot Water Heating	741,829	1,198,977	884,729
Total	$ 463,175,273	$ 423,508,734	$ 379,159,588
Income from Plant Leased to Others	$ 56,086	$ 344,462	$ 496,272
Income from Merchandising and Jobbing	59,280	(4,611)	4,583
Other Income - Net	27,438,406	24,400,654	38,404,446
Gross Income	$ 490,729,045	$ 448,249,239	$ 418,064,889
Interest on Long-Term Debt	$ 146,558,104	$ 148,756,148	$ 134,748,114
Amortization of Debt Discount and Premium	1,081,350	1,080,479	1,590,307
Interest on Debt to Associated Companies	(533,343)	3,334,300	2,321,197
Other Deductions	28,060,483	12,365,858	13,621,168
Net Income	$ 315,562,451	$ 282,712,454	$ 265,784,103
Dividend Appropriations on Preferred Stock	$ 28,877,470	$ 23,777,320	$ 23,917,095
Dividend Appropriations on Common Stock 2/	191,824,432	173,460,866	167,913,095
Balance Transferred to Surplus	$ 94,860,549	$ 85,474,268	$ 73,953,913

TABLE 3 (Concluded)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1979-1977

	1979	1978	1977
Municipal Utilities			
Net Operating Revenues			
Electric	$ 4,999,892	$ 4,882,706	$ 5,436,910
Gas	24,391	26,284	35,267
Water	13,144,146	12,319,230	9,808,651
Sewer	44,999	25,603	(345,024)
Steam and Hot Water Heating	(8,205)	(4,910)	(4,347)
Total	$ 18,205,223	$ 17,248,913	$ 14,931,457
Income from Plant Leased to Other	$ 900	$ 900	$ 900
Income from Merchandising and Jobbing	86,053	154,159	152,783
Other Income - Net	9,292,825	7,516,259	5,337,387
Gross Income	$ 27,585,001	$ 24,920,231	$ 20,422,527
Interest on Long-Term Debt	$ 10,517,312	$ 9,738,979	$ 9,063,848
Amortization of Debt Discount and Premium	197,204	249,680	164,502
Interest on Debt to City	3,308,419	3,193,267	3,053,169
Other Deductions	(67,462	(273,515)	(292,824)
Net Income	$ 13,629,528	$ 12,011,820	$ 8,433,832
Appropriations to City	1,796,811	1,257,307	1,248,834
Balance Transferred to Surplus	$ 11,832,717	$ 10,754,513	$ 7,184,998

1/ Includes out-of-state operations of Wisconsin utilities.

2/ Excluding Stock Dividends.

ELECTRIC UTILITY STATISTICS

Comparative statistics of Wisconsin electric utilities for the 3-year period, 1977 to 1979, are summarized in this section. Out-of-state operations are excluded (except in tables 7, 8 and 9 where data on out-of-state sales, purchases and generating plant are presented).

The following tables and charts present the data covering electric utility operations:

Table 4 - Comparative Statement of Revenues and Expenses, 1977-1979
Table 5 - Sales to Ultimate Customers, 1977-1979
Table 6 - Comparative Statement of Operating Expenses, 1977-1979
Table 7 - Summary of Megawatt Hours Sold and Used, 1977-1979
Table 8 - Megawatt Hours Generated and Purchased, 1977-1979
Table 9 - Generating Plant, Substation and Transmission Line Data, 1977-1979
Table 10 - Condensed Summary of 1979 Operations - Individual Private Electric Utilities
Table 11 - Condensed Summary of 1979 Operations - Individual Municipal Electric Utilities
Chart 10 - Residential Revenue and Consumption Ratios, Wisconsin and United States, 1970-1979
Chart 11 - Comparison of Revenues and Expenses, Wisconsin Electric Utilities, 1970-1979
Chart 12 - Revenues from Sales to Ultimate Consumers by Individual Wisconsin Electric Utilities, Percent of Total, 1979

Electric Consumers

The total number of ultimate (retail) electric consumers increased 2.2% over 1978. Residential customers increased 2.4% and rural customers increased 0.1%. Commercial and industrial customers increased 1.9%.

As has already been pointed out, electric cooperatives are not included in the tables. These organizations served an estimated 153,000 customers during 1979. This was 53% of all rural electric customers served in the state.

Revenue and Consumption Ratios

Kilowatt hours sold to ultimate consumers in Wisconsin rose 2.8% during 1979. Commercial and industrial consumption rose 3.6% during the year while residential and rural consumption increased 2.0% and 0.5% respectively.

State-wide averages by class of service for revenue per megawatt hour are compared below.

	1979	1978	1977
Residential	$ 43.65	$ 39.87	$ 37.10
Commercial and Industrial	35.20	31.81	29.88
Rural	44.75	40.76	38.71
Public St. and Hwy. Lighting	48.67	44.56	41.55
Other Sales to Public Auth.	32.88	30.55	29.01
Interdepartmental Sales	34.24	28.92	26.01
Total Ultimate Consumers	$ 38.29	$ 34.78	$ 32.64

State-wide average ratios of kilowatt hour consumption per customer and revenue per customer are compared below for the three major classes of service:

	1979	1978	1977
Average Annual Use (kWh)			
Residential	6,976	7,007	6,961
Commercial and Industrial	125,089	122,980	117,393
Rural	13,711	13,604	13,662
Average Annual Bill			
Residential	$ 304.51	$ 279.38	$ 258.23
Commercial and Industrial	4,403.73	3,911.97	3,507.20
Rural	613.55	554.55	528.85

Average annual use for residential customers decreased by 0.4%, commercial and industrial increased by 1.7% and rural increased by 0.8%. Average annual bills were up by 13.9%, 12.6% and 10.8% respectively for the three classes of service.

Residential revenue and consumption ratios of Wisconsin utilities are compared with national averages over a 10-year period in Chart 10. In 1979, the average Wisconsin residential customer consumed 21.0% fewer kilowatt hours and paid an average bill that was 20.3% less than the national average.

Electric Utility Income Account

A summary of the income account of Wisconsin electric utilities for the past three years is presented in Table 4. A 10-year graphic comparison is made in Chart 11.

Operating revenues continue to rise steadily with 1979 revenues up 14.5% over 1978. Total operating expenses increased 15.5% and net operating revenues were up 7.9%.

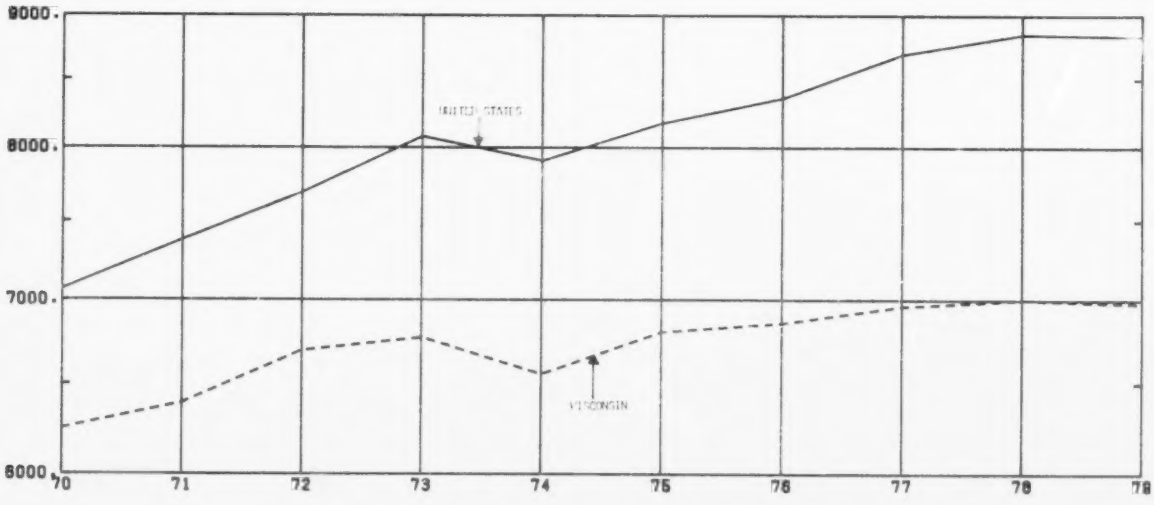
Table 6 presents a detailed analysis of operating expenses, exclusive of depreciation and taxes. Of the classes of expense shown, production had the greatest increase which was 19.4%. Sales was least with a 17.6% decrease.

A comparison of certain expense ratios of private and municipal utilities in 1979 is presented below:

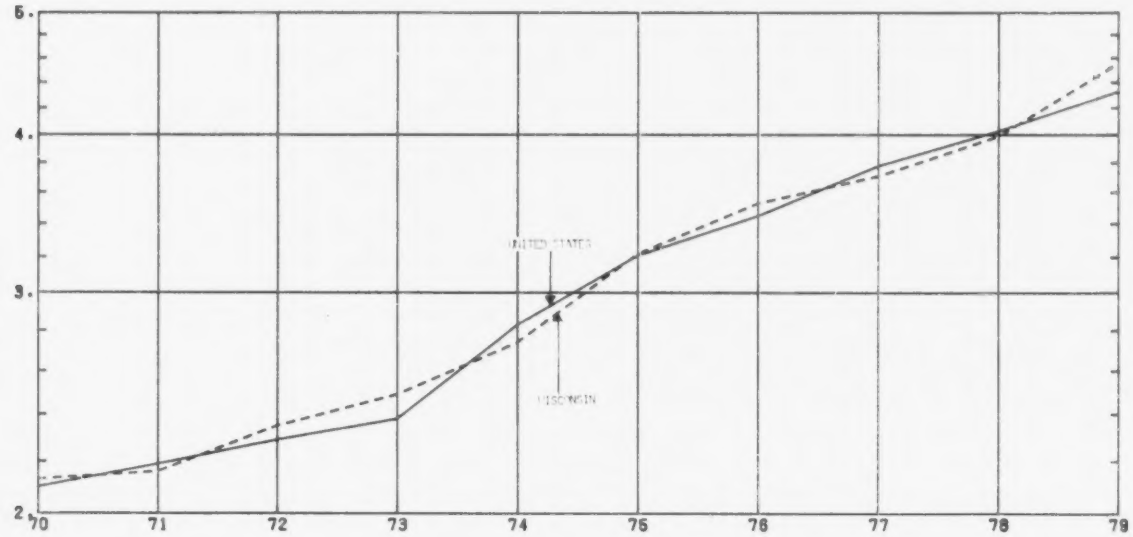
	1979 Expense Ratios					
	Per Dollar of Revenue		Per Average Customer		Per mWh Sold	
	Pvt.	Mun.	Pvt.	Mun.	Pvt.	Mun.
Production and Trans.	47.09¢	78.92¢	$420.95	$563.09	$21.16	$28.60
Distribution	4.96	3.40	44.31	24.28	2.23	1.23
Customer Accounts	1.76	1.57	15.77	11.14	0.79	0.57
Customer Services	0.37	0.00	3.28	0.00	0.17	0.00
Sales Promotion 1/	0.08	0.01	0.77	0.09	0.04	0.01
Administrative and General	6.14	4.70	54.84	33.54	2.75	1.70
Total Oper. and Main.	60.40	88.60	539.92	632.14	27.14	32.11
Depreciation	11.44	4.61	102.28	32.92	5.14	1.67
Taxes Other than Income Taxes	4.22	2.85	37.75	20.31	1.90	1.03
Income Taxes	7.94	0.00	70.97	0.00	3.57	0.00
Total Operating	84.00¢	96.06¢	$750.92	$685.37	$37.75	$34.81

1/ Includes customer service expenses for municipally owned utilities.

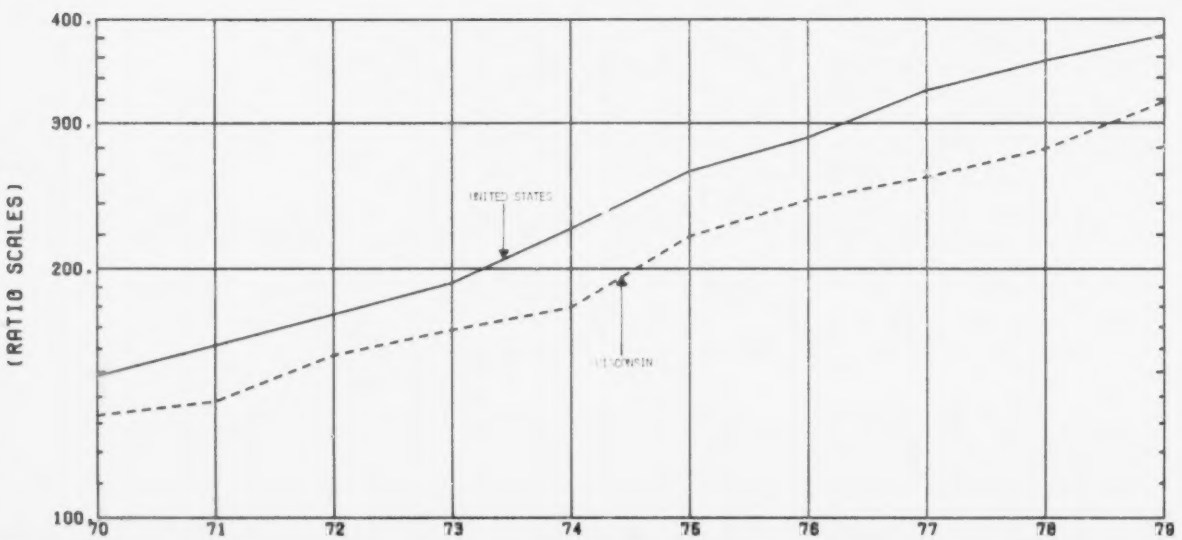
CHART 10
WISCONSIN AND U.S. RESIDENTIAL REVENUE AND CONSUMPTION RATIOS



ANNUAL KILOWATT HOUR SALES PER CUSTOMER

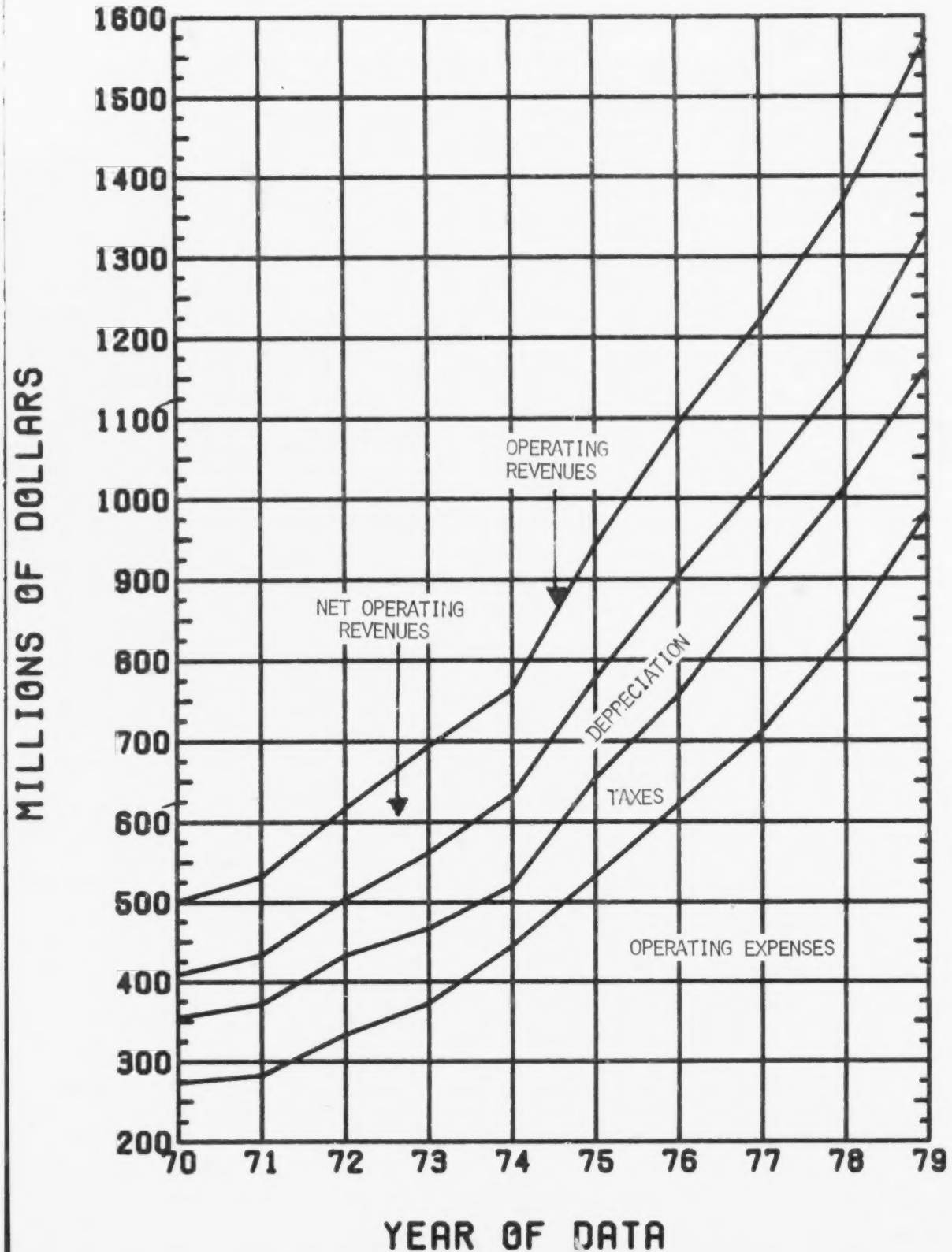


REVENUE PER KILOWATT HOUR



REVENUE PER CUSTOMER

CHART 11
WISCONSIN ELECTRIC UTILITIES REVENUES AND EXPENSES



In addition to the above breakdown of operating expenses, Table 6 presents the detail of production expense on a company-wide basis. If this breakdown is related to corresponding data on generation and purchases, the following comparison of costs per kilowatt hour, exclusive of fixed charges, results:

	Production Expense* Per Megawatt Hour Generated or Purchased 1979	
	Private Utilities	Municipal Utilities
Steam Plants-Nuclear Fuel	$ 6.05	$ 0.00
Steam Plants-Fossil Fuel	18.94	39.15
Hydro Electric Plants	4.31	3.82
Internal Combustion (Recip. & Turbine)	42.56	44.57
Purchased Energy	24.35	25.93

*Excludes depreciation, taxes, and return.

Kilowatt Hours Generated and Purchased; Fuel Consumed

The sources of energy of Wisconsin electric utilities are summarized in Table 8. The net generation by plants located in Wisconsin is compared below on a percentage basis over a period of ten years:

	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Steam-Nuclear	29.7%	34.3%	33.3%	33.0%	33.4%	27.5%	20.1%	11.3%	12.8%	0.0
Steam-Fossil	62.9	58.1	60.8	60.9	59.5	63.8	70.5	80.3	79.6	92.7
Hydro	5.0	5.1	4.2	3.6	4.8	5.0	6.2	6.6	6.2	5.7
Int. Comb.-Recip.	0.1	0.2	0.1	0.6	0.2	0.2	0.2	0.2	0.2	0.2
Int. Comb.-Turbine	2.3	2.3	1.6	1.9	2.1	3.5	3.0	1.6	1.2	1.4
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0

During the ten years covered, fossil steam generating plants have produced a major portion of the State's electric energy, varying from a high of 92.7% in 1970 to a low of 58.1% in 1978. Internal combustion turbine plants are being used in increasing numbers as peaking units. There were sixteen units in operation at the end of 1979 as compared to only eleven in 1970. Privately owned utilities generated 98.8% of total energy produced by utilities in 1979. The most significant change has been the nuclear plants which generated no energy in 1970 but now produce about 30% of the total.

Fuel consumption ratios over the past five years are presented below:

	1979	1978	1977	1976	1975
BTU's of Fuel Used in Nuclear Steam Plants Per kWh Generated (Net)	10,605	10,554	10,491	10,550	10,806
BTU's of Fuel Used in Fossil Steam Plants Per kWh Generated (Net)	11,157	11,271	10,931	10,839	11,066
BTU's of Fuel Used in Turbine Plants Per kWh Generated (Net)	14,493	13,792	14,538	14,439	14,948
BTU's of Fuel Used in Reciprocating Plants Per kWh Generated (Net)	10,727	10,688	9,489	12,249	10,238

Generating Plant and Transmission Line Data

Data on the capacity of generating plants and miles of transmission pole line are presented in Table 9. The total capacity of all generating plants operated by Wisconsin utilities as of December 1979 was about 9,000 megawatts of which about 95 megawatts were in plants located outside the State. Of the capacity of plants located in Wisconsin, 17.1% is steam-nuclear, 63.6% is steam-fossil, 3.9% is hydro, 1.2% is by reciprocating engines, and 14.2% is turbine.

About 9,300 miles of transmission line were in service at the close of 1979 of which about 4,100 miles carry voltage in excess of 100,000 volts.

Data on Individual Utilities

Table 10 presents selected operating data covering the year 1979 for each Class A, B, and C private electric utility in the State and Table 11 presents similar data on each Class A, B, and C municipal electric utility. Chart 12 shows the percentage distribution by companies of electric operating revenue from sales to ultimate consumers. Four large private utilities account for 82.2% of the total. Municipal utilities make up 9.1%.

Table 10 shows that private utilities as a group generated a large part of their energy requirements while Table 11 shows that municipal utilities purchase most of their requirements. Of the 64 individual municipal utilities listed, only 15 generated some electricity.

CHART 12

Revenues of Wisconsin Electric Utilities
In Percent of Total Sales to Ultimate Consumers
1979

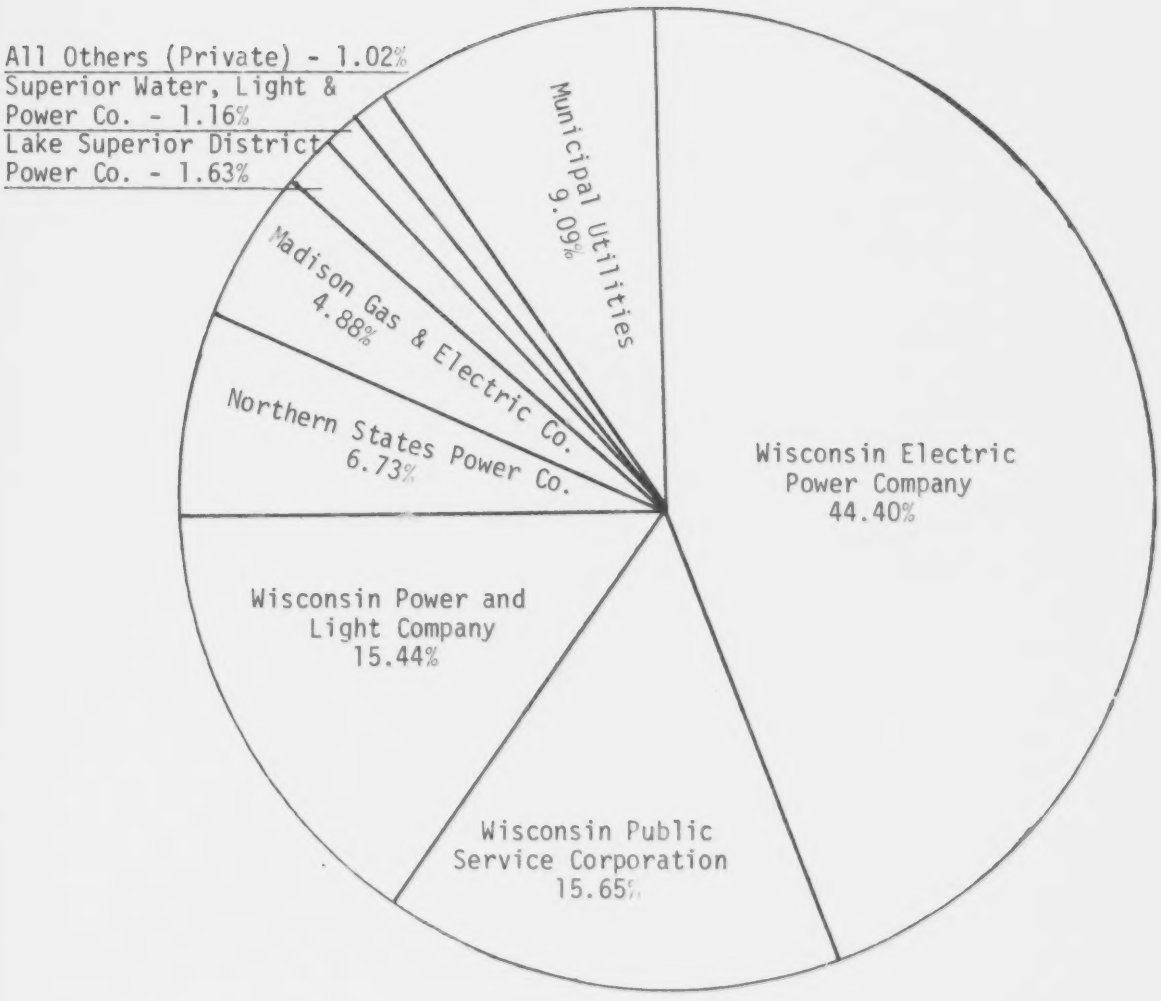

All Others (Private) - 1.02%
Superior Water, Light & Power Co. - 1.16%
Lake Superior District Power Co. - 1.63%
Municipal Utilities 9.09%
Madison Gas & Electric Co. 4.88%
Northern States Power Co. 6.73%
Wisconsin Electric Power Company 44.40%
Wisconsin Power and Light Company 15.44%
Wisconsin Public Service Corporation 15.65%

TABLE 4

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
All Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,362,669,434	$1,203,672,136	$1,074,581,080
Sales to Other Utilities	147,577,609	116,812,301	103,238,969
Sales to Electric Cooperatives	7,311,706	7,903,999	6,395,096
Miscellaneous Revenues	51,025,707	41,634,957	37,430,762
Total Operating Revenues	$1,568,584,456	$1,370,023,393	$1,221,645,907
Operating Revenue Deductions			
Operation and Maintenance	$ 983,292,255	$ 830,908,139	$ 711,948,340
Depreciation and Amortization	170,807,124	138,377,797	134,425,223
Taxes Other than Income Taxes	64,493,653	66,910,979	64,018,190
Income Taxes	114,459,322	115,459,589	111,556,641
Total Operating Expenses	$1,333,052,354	$1,151,656,504	$1,021,948,394
Net Operating Revenues	$ 235,532,102	$ 218,366,889	$ 199,697,513
Private Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,238,903,708	$1,092,675,008	$ 977,419,786
Sales to Other Utilities	145,780,092	115,832,964	102,586,892
Sales to Electric Cooperatives	7,251,252	7,903,999	6,395,096
Miscellaneous Revenues	49,619,735	40,345,875	36,340,543
Total Operating Revenues	$1,441,554,787	$1,256,757,846	$1,122,742,317
Operating Revenue Deductions			
Operation and Maintenance	$ 870,740,128	$ 731,650,081	$ 627,162,266
Depreciation and Amortization	164,945,913	132,814,954	129,266,929
Taxes Other than Income Taxes	60,877,216	63,349,039	60,496,058
Income Taxes	114,459,322	115,459,589	111,556,641
Total Operating Expenses	$1,211,022,579	$1,043,273,663	$ 928,481,894
Net Operating Revenues	$ 230,532,208	$ 213,484,183	$ 194,260,423

(Continued)

TABLE 4 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
Municipal Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$ 123,765,726	$ 110,997,128	$ 97,161,294
Sales to Other Electric Utilities	1,797,517	979,337	652,077
Sales to Electric Cooperatives	60,454	0	0
Miscellaneous Operating Revenues	1,405,972	1,289,082	1,090,219
Total Operating Revenues	$ 127,029,669	$ 113,265,547	$ 98,903,590
Operating Revenue Deductions			
Operation and Maintenance	$ 112,552,127	$ 99,258,058	$ 84,786,074
Depreciation and Amortization	5,861,211	5,562,843	5,158,294
Taxes Other than Income Taxes	3,616,437	3,561,940	3,522,132
Total Operating Expenses	$ 122,029,775	$ 108,382,841	$ 93,466,500
Net Operating Revenues	$ 4,999,894	$ 4,882,706	$ 5,437,090

1/ Excluding out-of-state operations.

TABLE 5

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
All Electric Utilities			
Revenues			
Residential	$ 446,918,206	$ 400,514,783	$ 360,922,109
Commercial and Industrial	791,821,576	690,486,511	609,341,514
Rural	84,605,671	76,086,285	69,755,878
Public Street and Highway Lighting	23,253,901	21,046,249	19,868,955
Other Sales to Public Authorities	13,675,573	13,334,910	12,518,682
Interdepartmental Sales	2,394,507	2,203,398	2,173,942
Total Revenue from Ultimate Consumers	$1,362,669,434	$1,203,672,136	$1,074,581,080
Megawatt Hours Sold			
Residential	10,237,699	10,045,259	9,729,577
Commercial and Industrial	22,491,789	21,706,819	20,395,997
Rural	1,890,610	1,866,462	1,801,993
Public Street and Highway Lighting	477,823	472,363	478,194
Other Sales to Public Authorities	415,862	436,443	431,546
Interdepartmental Sales	69,925	76,187	83,586
Total Megawatt Hours Sold to Ultimate Consumers	35,583,708	34,603,533	32,920,893
Average Number of Customers 2/			
Residential	1,467,650	1,433,596	1,397,662
Commercial and Industrial	179,807	176,506	173,740
Rural	137,895	137,203	131,901
Public Street and Highway Lighting	3,322	3,312	3,304
Other Sales to Public Authorities	1,268	1,216	1,311
Interdepartmental Sales	112	112	104
Total Ultimate Consumers	1,790,054	1,751,945	1,708,022

(Continued)

TABLE 5 (Continued)

SALES TO ULTIMATE CONSUMERS BY CLASSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
Private Electric Utilities			
Revenues			
Residential	$ 408,823,932	$ 365,381,109	$ 329,856,903
Commercial and Industrial	719,479,731	626,882,523	554,539,895
Rural	76,665,274	68,832,748	63,084,126
Public Street and Highway Lighting	20,555,130	18,515,539	17,473,303
Other Sales to Public Authorities	12,566,214	12,267,100	11,564,164
Interdepartmental Sales	813,427	795,989	901,395
Total Revenue from Ultimate Consumers	$1,238,903,708	$1,092,675,008	$ 977,419,786
Megawatt Hours Sold			
Residential	9,198,672	9,021,572	8,752,622
Commercial and Industrial	20,340,233	19,681,422	18,526,581
Rural	1,694,270	1,678,478	1,614,232
Public Street and Highway Lighting	432,115	427,018	433,067
Other Sales to Public Authorities	387,354	407,685	403,443
Interdepartmental Sales	25,659	32,428	38,602
Total Megawatt Hours Sold to Ultimate Consumers	32,078,303	31,248,603	29,768,547
Average Number of Customers 2/			
Residential	1,329,747	1,298,248	1,265,996
Commercial and Industrial	157,076	153,984	151,396
Rural	121,666	121,245	115,597
Public Street and Highway Lighting	3,179	3,169	3,159
Other Sales to Public Authorities	1,041	984	960
Interdepartmental Sales	9	9	9
Total Ultimate Consumers	1,612,718	1,577,639	1,537,117

(Continued)

TABLE 5 (Concluded)

SALES TO ULTIMATE CONSUMERS BY CLASSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
Municipal Electric Utilities			
Revenues			
Residential	$ 38,094,274	$ 35,133,674	$ 31,065,206
Commercial and Industrial	72,341,845	63,603,988	54,801,619
Rural	7,940,397	7,253,537	6,671,752
Public Street and Highway Lighting	2,698,771	2,530,710	2,395,652
Other Sales to Public Authorities	1,109,359	1,067,810	954,518
Interdepartmental Sales	1,581,080	1,407,409	1,272,547
Total Revenue from Ultimate Consumers	$ 123,765,726	$ 110,997,128	$ 97,161,294
Megawatt Hours Sold			
Residential	1,039,027	1,023,687	976,955
Commercial and Industrial	2,151,556	2,025,397	1,869,416
Rural	196,340	187,984	187,761
Public Street and Highway Lighting	45,708	45,345	45,127
Other Sales to Public Authorities	28,508	28,758	28,103
Interdepartmental Sales	44,266	43,759	44,984
Total Megawatt Hours Sold to Ultimate Consumers	3,505,405	3,354,930	3,152,346
Average Number of Customers 2/			
Residential	137,903	135,348	131,666
Commercial and Industrial	22,731	22,522	22,344
Rural	16,229	15,958	16,304
Public Street and Highway Lighting	143	143	145
Other Sales to Public Authorities	227	232	351
Interdepartmental Sales	103	103	96
Total Ultimate Consumers	177,336	174,306	170,906

1/ Excluding out-of-state operations.
2/ Heating, cooking and yard lighting customers on separate rates are not included in customer data, as they would be duplications.

TABLE 6

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
All Electric Utilities			
Production Expense-Total Company			
Steam-Nuclear Fuel	$ 61,672,565	$ 61,449,200	$ 56,505,117
Steam-Fossil Fuel	413,850,753	334,569,574	286,310,063
Hydraulic	9,722,879	7,948,129	6,872,426
Int. Comb.-Recip. and Turbine	35,325,213	31,377,949	20,826,098
Purchases or Net Interchanges	258,049,320	215,624,385	133,659,650
Other Power Supply	2,344,003	2,518,170	48,391,764
Total Production Expense	$780,964,733	$653,487,407	$552,565,118
Amount Applicable to Out-of-State Sales	16,160,558	12,754,281	9,918,300
Amount Applicable to Wisconsin Sales	$764,804,175	$640,733,126	$542,646,818
Operation and Maintenance - Wisconsin Only			
Production	$764,804,175	$640,733,126	$542,646,818
Transmission 2/	14,275,263	12,533,061	12,527,488
Distribution 2/	75,795,753	67,328,850	58,914,865
Customer Accounts	27,437,016	23,338,430	21,601,770
Sales Promotion 3/	1,237,445	1,498,513	1,768,390
Customer Service	5,311,787	4,999,986	4,241,184
Administrative and General	94,430,816	80,476,173	70,247,825
Total	$983,292,255	$830,908,139	$711,948,340
Private Electric Utilities			
Production Expense - Total Company			
Steam-Nuclear Fuel	$ 61,672,565	$ 61,449,200	$ 56,505,117
Steam-Fossil Fuel	403,855,661	322,475,523	273,973,318
Hydraulic	9,284,058	7,646,831	6,607,003
Int. Comb.-Recip. and Turbine	33,214,791	29,318,144	19,128,376
Purchases or Net Interchanges	170,402,602	141,929,647	73,011,336
Other Power Supply	2,341,322	2,486,505	48,376,800
Total Production Expense	$680,770,999	$565,305,850	$477,601,950
Amount Applicable to Out-of-State Sales	16,160,558	12,754,281	9,918,300
Amount Applicable to Wisconsin Sales	$664,610,441	$552,551,569	$467,683,650
Operation and Maintenance - Wisconsin Only			
Production	$664,610,441	$552,551,569	$467,683,650
Transmisstion 2/	14,211,073	12,256,005	12,364,925
Distribution 2/	71,472,934	63,734,851	55,480,355
Customer Accounts	25,454,135	21,510,084	19,984,040
Sales Promotion	1,221,730	1,485,539	1,752,618
Customer Service	5,311,787	4,999,986	4,241,184
Administrative and General	88,458,028	75,112,047	65,655,494
Total	$870,740,128	$731,650,081	$627,162,266

TABLE 6 (Concluded)

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1979-1977

	1979	1978	1977
Municipal Electric Utilities			
Production Expense			
Steam-Fossil Fuel	$ 9,995,092	$ 12,094,051	$ 12,336,745
Hydraulic	438,821	301,298	265,423
Int. Com.-Recip. and Turbine	2,110,422	2,059,805	1,697,722
Purchases or Net Interchanges	87,646,718	73,694,738	60,648,314
Other Power Supply	2,681	31,665	14,964
Total Production Expense	$100,193,734	$ 88,181,557	$ 74,963,168
Transmission 2/	64,190	277,056	162,563
Distribution 2/	4,322,819	3,593,999	3,434,510
Customer Accounts	1,982,881	1,828,346	1,617,730
Sales 3/	15,715	12,974	15,772
Administrative and General	5,972,788	5,364,126	4,592,331
Total	$112,552,127	$ 99,258,058	$ 84,786,074

1/ Out-of-state operations of Wisconsin Utilities are not included except in detail of production expenses, as indicated.

2/ Transmission and distribution expenses are combined in the Class D report forms. These utilities are assumed to have no transmission expense.

3/ Includes customer service expense of municipal utilities.

TABLE 7

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
All Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	35,583,708	34,603,533	32,920,892
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	4,866,363	4,260,238	3,718,685
Electric Cooperatives	298,698	288,578	278,660
Total Sold to Other Electric Utilities and Cooperatives	5,165,061	4,548,816	3,997,345
MWh Used by Utilities 1/	101,036	98,903	99,897
Total MWh Sold or Used in Wisconsin	40,849,805	39,251,252	37,018,134
MWh Used by Utilities Out-of-State	7,021	3/	3/
MWh Sold Outside Wisconsin by Wisconsin Utilities 2/	1,434,005	1,224,943	1,403,443
Total MWh Sold or Used	42,290,831	40,476,195	38,421,577
MWh Unaccounted for	2,965,703	3,004,610	2,670,235
Total MWh Generated and Purchased	45,256,534	43,480,805	41,091,812

(Continued)

TABLE 7 (Continued)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
Private Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	32,078,303	31,248,603	29,768,547
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	4,789,335	4,213,491	3,691,689
Electric Cooperatives	298,336	288,578	278,660
Total Sold to Other Electric Utilities and Cooperatives	5,087,671	4,502,069	3,970,349
MWh Used by Utilities 1/	96,632	94,605	94,720
Total MWh Sold or Used in Wisconsin	37,262,606	35,845,277	33,833,616
MWh Used by Utilities Out-of-State	7,021	3/	3/
Total MWh Sold Outside Wisconsin by Wisconsin Utilities 2/	1,434,005	1,224,943	1,403,443
Total MWh Sold or Used	38,703,632	37,070,220	35,237,059
MWh Unaccounted for	2,754,744	2,809,645	2,486,464
Total MWh Generated and Purchased	41,458,376	39,879,865	37,723,523

(Continued)

TABLE 7 (Concluded)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
Municipal Electric Utilities			
MWh Sold to Ultimate Consumers	3,505,405	3,354,930	3,152,345
MWh Sold to Other Electric Utilities and Cooperatives			
Wisconsin Electric Utilities	77,028	46,747	26,996
Electric Cooperatives	362	0	0
Total Sold to Other Electric Utilities and Cooperatives	77,390	46,747	26,996
MWh Used by Utilities 1/	4,404	4,298	5,177
Total MWh Sold or Used	3,587,199	3,405,975	3,184,518
MWh Unaccounted for	210,959	194,965	183,771
Total MWh Generated and Purchased	3,798,158	3,600,940	3,368,289

1/ Excluding interdepartmental sales.
2/ Includes sales to out-of-state utilities delivered in Wisconsin and at the state line.
3/ Out-of-state use was not tabulated separately prior to 1979.

TABLE 8

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
All Electric Utilities			
Net Generation in Wisconsin			
Steam - Nuclear	10,202,173	11,543,934	10,855,489
Steam - Fossil Fuel	21,579,086	19,598,846	19,828,402
Hydraulic	1,713,111	1,734,196	1,360,821
Internal Combustion - Recip.	43,068	55,615	42,444
Internal Combustion - Turbine	784,632	772,103	506,616
Total	34,322,070	33,704,694	32,593,772
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	554,386	455,305	375,956
Internal Combustion - Recip.	84	0	0
Total	554,470	455,305	375,956
Total Megawatt Hours Generated			
Steam - Nuclear	10,202,173	11,543,934	10,855,489
Steam - Fossil Fuel	21,579,086	19,598,846	19,828,402
Hydraulic	2,267,497	2,189,501	1,736,777
Internal Combustion - Recip.	43,152	55,615	42,444
Internal Combustion - Turbine	784,632	772,103	506,616
Total	34,876,540	34,159,999	32,969,728
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities	5,497,845	4,295,076	3,062,039
From Out-of-State Elec. Utils. 1/	4,353,240	4,082,791	4,098,258
From Electric Cooperatives	275,304	672,066	858,881
From Other Non-Utility Companies	253,605	270,873	102,906
Total	10,379,994	9,320,806	8,122,084
Total Megawatt Hours Generated and Purchased	45,256,534	43,480,805	41,091,812
Tons of Coal Used in Steam Plants	10,683,831	9,915,180	9,762,403
Gallons of Fuel Oil Used in Steam Plants	21,754,802	57,585,892	41,045,126
Therms of Natural Gas Used in Steam Plants	139,122,297	40,566,748	22,603,998
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	1,007,308	2,779,628	1,813,587
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	312,074	236,205	276,396
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	31,068,317	50,445,827	35,076,526
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	70,055,963	37,925,518	36,159,883

TABLE 8 (Continued)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
Private Electric Utilities			
Net Generation in Wisconsin			
Steam - Nuclear Fuel	10,202,173	11,543,934	10,855,489
Steam - Fossil Fuel	21,323,805	19,234,731	19,362,928
Hydraulic	1,598,122	1,611,573	1,269,315
Internal Combustion - Recip.	2,724	8,900	4,393
Internal Combustion - Turbine	777,626	766,719	501,092
Total	33,904,450	33,165,857	31,993,717
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	554,386	455,305	375,956
Internal Combustion - Recip.	84	0	0
Total	554,470	455,305	375,956
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	10,202,173	11,543,934	10,855,489
Steam - Fossil Fuel	21,323,805	19,234,731	19,362,928
Hydraulic	2,152,508	2,066,878	1,645,271
Internal Combustion - Recip.	2,808	8,900	4,393
Internal Combustion - Turbine	777,626	766,719	501,092
Total	34,458,920	33,621,162	32,369,673
Megawatt Hours Purchased Plus Net Interchanges			
From Wisconsin Electric Utilities	2,305,695	1,419,667	475,342
From Out-of-State Elec. Util. 1/	4,353,240	4,082,791	4,098,258
From Electric Cooperatives	89,536	486,803	677,743
From Other Non-Utility Companies	250,985	269,442	102,507
Total	6,999,456	6,258,703	5,353,850
Total Megawatt Hours Generated and Purchased	41,458,376	39,879,865	37,723,523
Tons of Coal Used in Steam Plants	10,512,428	9,677,050	9,477,492
Gallons of Fuel Oil Used in Steam Plants	21,728,910	57,507,450	40,661,596
Therms of Natural Gas Used in Steam Plants	139,122,297	40,566,748	22,603,998
Gallons of Fuel Oil Used in Internal Combustion - Recip. Plants	73,416	725,970	412,650
Therms of Natural Gas Used in Internal Combustion - Recip. Plants	175,140	0	0
Gallons of Fuel Oil Used in Internal Combustion - Turbine Plts.	31,006,214	50,414,490	34,798,974
Therms of Natural Gas Used in Internal Combustion - Turbine Plts.	70,055,963	37,556,666	36,159,883

TABLE 8 (Concluded)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
Municipal Electric Utilities			
Net Generation in Wisconsin			
Steam - Fossil Fuel	255,281	364,115	465,474
Hydraulic	114,989	122,623	91,506
Internal Combustion - Recip.	40,344	46,715	37,551
Internal Combustion - Turbine	7,006	5,384	5,524
Total	417,620	538,837	600,055
Megawatt Hours Purchased			
From Wisconsin Electric Utilities	3,192,150	2,875,409	2,586,697
From Electric Cooperatives	185,768	185,263	181,138
From Other Non-Utility Companies	2,620	1,431	399
Total	3,380,538	3,062,103	2,768,234
Total Megawatt Hours Generated and Purchased	3,798,158	3,600,940	3,368,289
Tons of Coal Used in Steam Plants	171,810	238,130	284,911
Gallons of Fuel Oil Used in Steam Plants	25,892	78,442	383,530
Therms of Natural Gas Used in Steam Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	933,892	2,053,658	1,400,937
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	2,863,636	236,205	276,396
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plants	62,103	31,337	277,552
Therms of Natural Gas Used in Internal Combustion-Turbine Plants	0	368,852	0

1/ Includes purchases delivered in Wisconsin or at state line.

TABLE 9

GENERATING PLANT AND TRANSMISSION LINE DATA
WISCONSIN ELECTRIC UTILITIES
1979-1977

	1979	1978	1977
Capacity of Generators in Kilowatts			
All Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	5,720,654	5,720,654	5,164,654
Hydraulic	349,170	349,290	349,138
Internal Combustion - Recip.	102,904	98,028	110,182
Internal Combustion - Turbine	1,279,700	1,279,700	1,066,700
Total	8,993,110	8,988,354	8,231,356
Private Utility Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	5,566,724	5,566,724	5,010,724
Hydraulic	330,425	330,425	330,325
Internal Combustion-Recip.	34,721	34,721	49,176
Internal Combustion-Turbine	1,259,700	1,259,700	1,046,700
Total	8,732,252	8,732,252	7,977,607
Municipal Utility Plants in Wisconsin			
Steam - Fossil Fuel	153,930	153,930	153,930
Hydraulic	18,745	18,865	18,813
Internal Combustion-Recip.	68,183	63,307	61,006
Internal Combustion-Turbine	20,000	20,000	20,000
Total	260,858	256,102	253,749
Plants Located Outside Wisconsin Operated by Wisconsin Utils. 1/			
Hydraulic	90,699	90,699	90,699
Internal Combustion-Recip.	5,042	5,042	0
Total	95,741	95,741	90,699
Total Plants Operated by Wisconsin Utilities			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	5,720,654	5,720,654	5,164,654
Hydraulic	439,869	439,989	439,837
Internal Combustion-Recip.	107,946	103,070	110,182
Internal Combustion-Turbine	1,279,700	1,279,700	1,066,700
Total	9,088,851	9,084,095	8,322,055
Miles of Transmission Pole or Tower (Including Out-of-State)			
Over 100,000 Volts	4,138	4,054	3,985
Less than 100,000 Volts	5,127	5,427	5,507

1/ Out-of-State plants are all owned by private electric utilities.

TABLE 10

CONDENSED SUMMARY OF 1979 OPERATIONS
INDIVIDUAL PRIVATE ELECTRIC UTILITIES 1/

Utilities	Operating Revenues 2/	Operation & Maintenance	Depreciation & Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Consumers 3/	MWh Generated 4/	MWh Purchased 4/
Class A, B, and C										
Consolidated Water Power Co.	$ 5,574,351	$ 5,606,406	$ 269,801	$ 115,165	$ (162,115)	$ (254,906)	$ 331,703	$ 966	$ 137,385	$ 199,637
Dahlberg Light and Power Co.	2,735,753	2,100,608	173,743	78,673	107,852	274,877	49,946	7,502	2,534	54,259
Cross Plains Electric Co.	619,774	506,030	35,810	15,639	8,435	53,860	12,097	1,009	0	13,009
Lake Superior District Power Co.	24,381,399	16,152,530	2,661,263	907,735	1,455,314	3,204,557	588,566	30,812	366,496	414,614
Madison Gas & Electric Co.	89,250,049	47,696,108	12,095,540	4,146,009	8,430,163	16,882,229	2,301,884	92,968	2,344,829	31,749
North Central Power Co.	849,453	501,258	56,757	40,392	69,777	181,269	16,830	2,819	12,400	6,570
Northern States Power Co.	133,905,683	85,031,453	17,007,618	3,882,871	13,333,755	14,649,986	3,036,841	133,350	830,032	2,585.256
Northwestern Wisconsin Electric Co.	4,217,692	3,320,416	262,042	143,894	55,698	435,642	86,201	8,380	11,863	84,325
Pioneer Power & Light Co.	605,109	489,405	32,736	15,350	18,065	49,553	13,266	1,235	202	13,709
Superior Water, Light & Power Co.	18,035,252	15,808,593	546,242	285,936	481,878	912,603	486,793	12,432	34,179	488,322
Wisconsin Electric Power Co.	646,003,632	405,514,896	69,337,064	28,990,080	39,358,118	102,803,474	17,044,582	768,249	16,506,639	2,374,000
Wisconsin Power & light Co.	271,603,405	154,547,251	32,135,616	12,261,018	23,971,327	48,688,193	7,232,687	288,088	7,502,697	306,295
Wisconsin Public Service Corporation	243,436,813	123,171,229	30,312,847	9,989,900	27,327,434	42,635,406	6,474,848	264,469	6,709,658	420,606
Subtotal	$1,441,218,367	$870,446,182	$164,927,079	$ 60,872,662	$114,455,701	$230,516,743	$ 37,676,244	$ 1,612,279	$ 34,458,914	$ 6,992,351
Class D										
Westfield Milling & Electric. Co.	336,420	293,946	18,834	4,554	3,621	15,465	6,440	540	0	7,105
Grand Total	$1,441,554,787	$870,740,128	$164,945,913	$ 60,877,216	$114,459,322	$230,532,208	$ 37,682,684	$ 1,612,819	$ 34,458,914	$ 6,999,456

1/ Data included in this table include Wisconsin operations only, except where noted.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Excluding Off-Peak Water Heating and Area Lighting Customers.
4/ Total company operations are represented in data on generation and purchases. Companies operating outside Wisconsin are: Lake Superior District Power Company, Northwestern Wisconsin Electric Company, Wisconsin Electric Power Company, and Wisconsin Public Service Corporation. Where power is interchanged, the net figure is added to purchases.

TABLE 11

CONDENSED SUMMARY OF 1979 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES

Utilities	Operating Revenue	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
Class A, B and C									
Algoma	$ 1,151,942	$ 1,062,793	$ 34,643	$ 23,357	$ 31,149	28,859	1,739	0	[illegible]
Arcadia	915,324	737,423	75,414	47,124	55,363	21,454	1,101	911	21,146
Bangor	770,673	670,053	43,587	23,047	33,986	22,718	1,116	0	24,869
Barron	908,514	796,333	81,375	41,421	(10,615)	22,492	1,304	1,798	22,260
Black Earth	455,767	372,095	21,626	17,635	44,411	9,166	783	0	9,732
Black River Falls	960,947	871,365	66,151	52,948	(29,517)	33,110	2,141	4,538	31,413
Bloomer	898,356	793,206	30,249	17,784	57,117	27,541	1,426	0	29,381
Boscobel	876,715	807,298	37,761	28,126	3,530	22,073	1,401	0	23,352
Brodhead	781,318	746,274	23,527	14,861	(3,344)	20,577	1,465	0	21,936
Cedarburg	2,853,709	2,582,142	152,920	89,312	29,335	84,367	4,137	14,475	75,459
Clintonville	1,311,690	1,218,871	48,324	26,463	18,032	39,491	2,389	0	42,077
Columbus	1,283,517	1,197,471	45,014	32,004	9,028	30,928	1,926	0	34,224
Cuba City	501,205	448,459	22,029	11,799	18,918	11,274	829	0	12,044
Cumberland	924,374	738,308	94,146	38,142	53,778	17,601	1,079	1,070	16,692
Deerfield	325,142	261,977	18,802	11,590	32,773	7,875	598	0	8,582
Eagle River	763,300	686,936	25,734	15,544	35,086	18,507	1,006	0	19,265
Elkhorn	1,582,654	1,435,673	57,574	34,735	54,672	45,937	2,265	0	49,344
Elroy	399,349	333,268	37,768	17,976	10,337	10,251	761	296	10,430
Evansville	1,378,629	1,246,779	43,079	26,054	62,717	33,305	2,054	0	35,222
Fennimore	680,432	618,199	44,278	20,683	(2,728)	16,707	1,079	400	17,828
Hartford	1,835,200	1,744,699	43,994	36,811	9,696	54,188	2,838	0	57,349
Hustisford	482,927	408,195	32,965	15,931	25,836	10,458	1,013	0	11,376
Jefferson	2,411,926	2,363,613	57,366	41,063	(50,116)	82,905	2,717	0	85,758
Juneau	794,886	726,417	35,448	17,851	15,170	19,848	766	0	20,624
Kaukauna	11,493,744	10,432,207	518,420	301,452	241,665	527,880	8,071	112,666	437,607
Kiel	964,089	901,811	49,025	27,060	(13,807)	27,769	1,565	0	29,933
Lake Mills	1,341,290	1,268,949	63,844	28,906	(20,409)	41,472	2,310	0	44,038
Lodi	503,315	444,769	19,250	12,198	27,098	11,751	929	0	12,541
Manitowoc	9,485,922	8,389,347	498,181	318,583	279,811	248,838	13,809	70,002	195,443
Marshfield	7,770,919	6,564,201	398,508	309,688	498,522	195,653	9,053	96,511	111,892
Medford	1,905,512	1,688,435	66,040	39,951	111,086	49,538	2,283	0	52,569
Menasha	4,773,298	3,828,614	353,811	249,334	341,539	117,540	6,104	60,194	68,831
Mount Horeb	1,103,246	933,566	60,633	32,627	76,420	26,227	1,596	0	28,271
Muscoda	483,601	474,157	32,714	19,797	(43,067)	11,389	798	0	12,264
New Glarus	455,338	426,428	13,601	7,937	7,372	11,686	796	0	12,262

GAS UTILITY SUMMARY

Comparative statistics of the gas utility industry in Wisconsin for the three year period 1977-1979 are presented in this section. The following tables and charts deal with gas utility operations:

Table 12 - Comparative Statement of Revenues and Expenses, 1979-1977.
Table 13 - Sales to Ultimate Consumers by Classes, 1979-1977.
Table 14 - Operating and Plant Statistics, 1979-1977.
Table 15 - Condensed Summary of 1979 Operations - Individual Utilities.

Chart 13 - Comparison of Revenues and Expenses, Wisconsin Gas Utilities, 1970-1979.
Chart 14 - Residential Revenue and Consumption Ratios, Wisconsin Gas Utilities, 1970-1979.
Chart 15 - Revenue of Individual Gas Utilities, Percent of Total Sales to Ultimate Consumers, 1979.

Gas Utility Revenues and Expenses

Table 12 and Chart 13 show that gas utility revenues in 1979 were up about 22.9% from the previous year. Expense rose 23.9% during the same period. Therms sold to ultimate consumers increased 7.4% and the number of ultimate (retail) consumers increased 2.2%.

Sales to Ultimate Consumers

Table 13 summarizes sales to ultimate consumers. Percentage changes in 1979 by principle classes of service are given below:

	% Change From 1978 to 1979		
	Revenues	Therms Sold	Number of Customers
Residential - General	(0.94)%	(13.12)%	(6.29)%
Residential - Space Heating	15.29	1.26	3.74
Commercial and Industrial - Firm	21.36	2.04	(8.73)
Commercial and Industrial - Interr.	41.21	19.52	(2.89)
Commercial and Industrial - Sp. Htg.	18.40	3.75	5.07
Total Sales to Ultimate Consumers	23.12%	7.42%	2.20%

The number of residential space heating customers rose 3.74% during 1979. Since many of these customers formerly took service as residential general customers, a decline occurred in the number served in that classification. Commercial and Industrial space heating customers rose while there was a decline in firm and interruptible customers. Overall the number of commercial and industrial customers was up about 3%.

The decline in therms sold to residential-general consumers was due to the reduction in customers.

CHART 13
SCONSIN GAS UTILITIES REVENUES AND EXPENSES

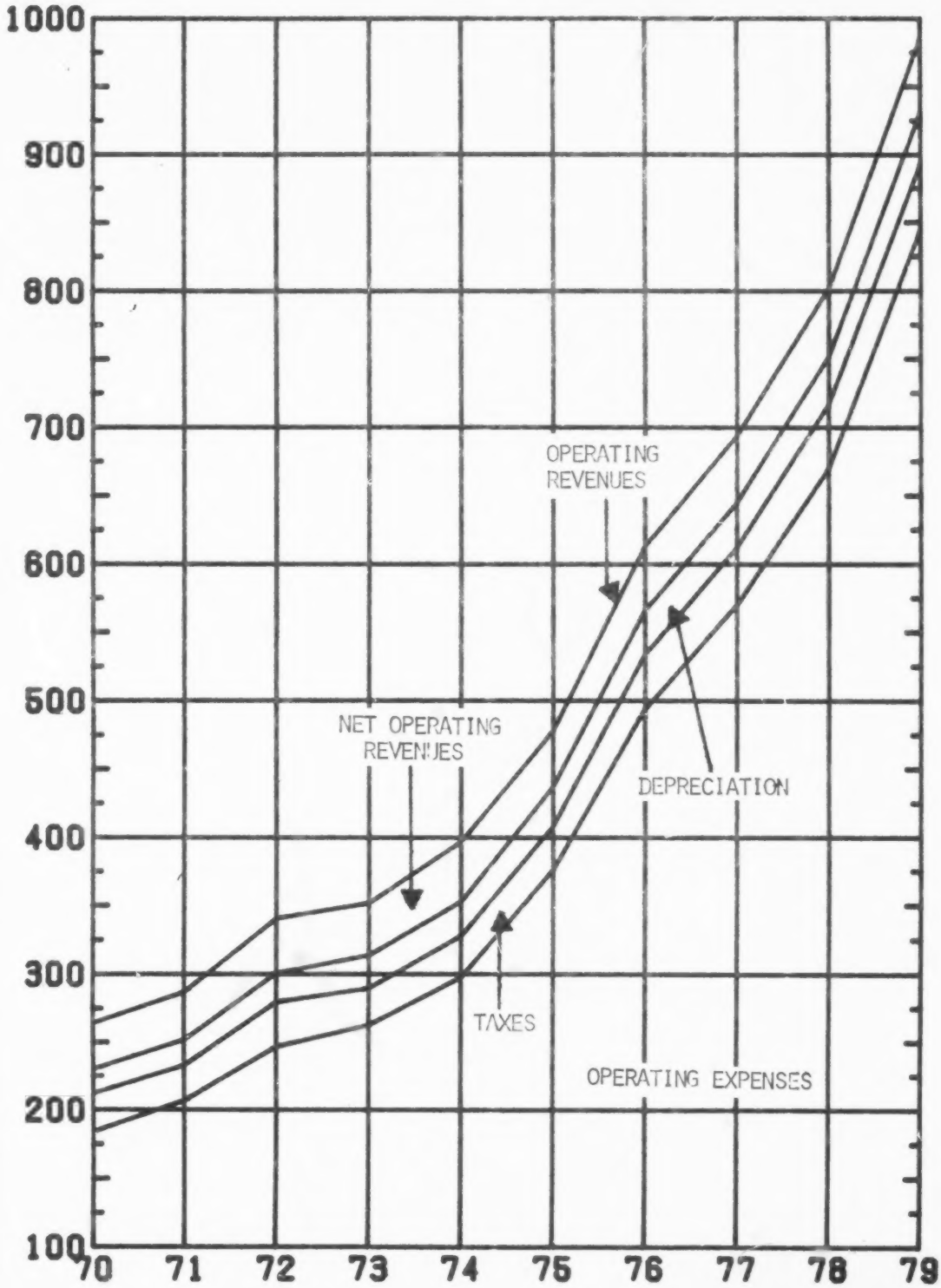


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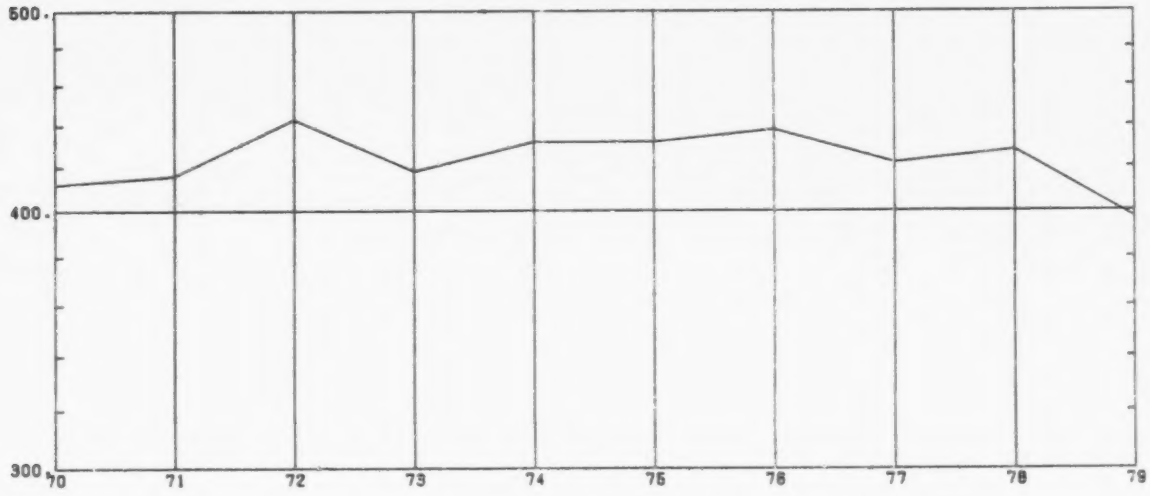
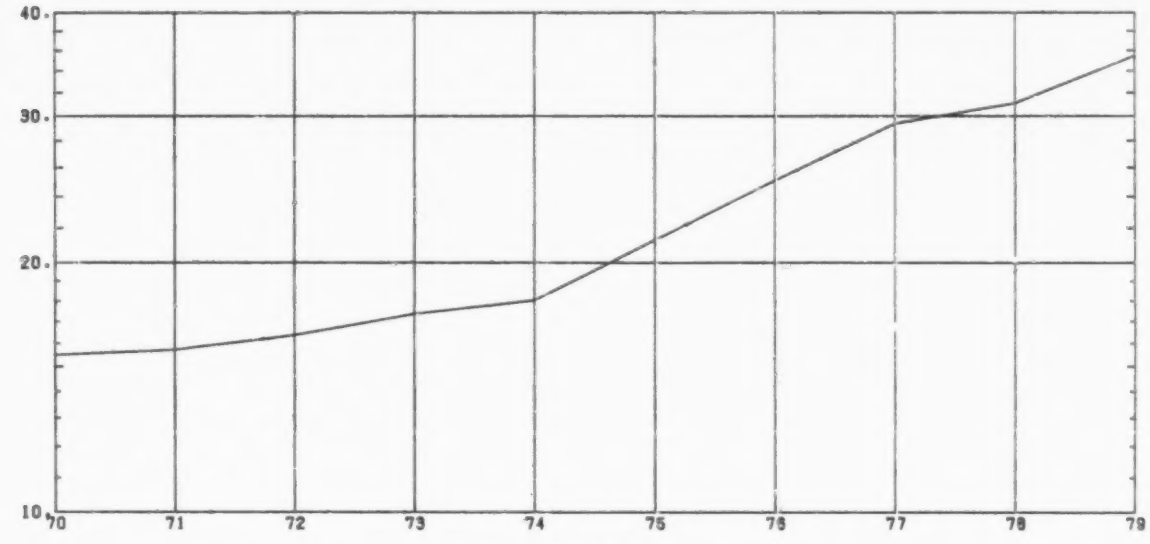
CHART 14
GAS UTILITY RESIDENTIAL REVENUE AND CONSUMPTION RATIOS

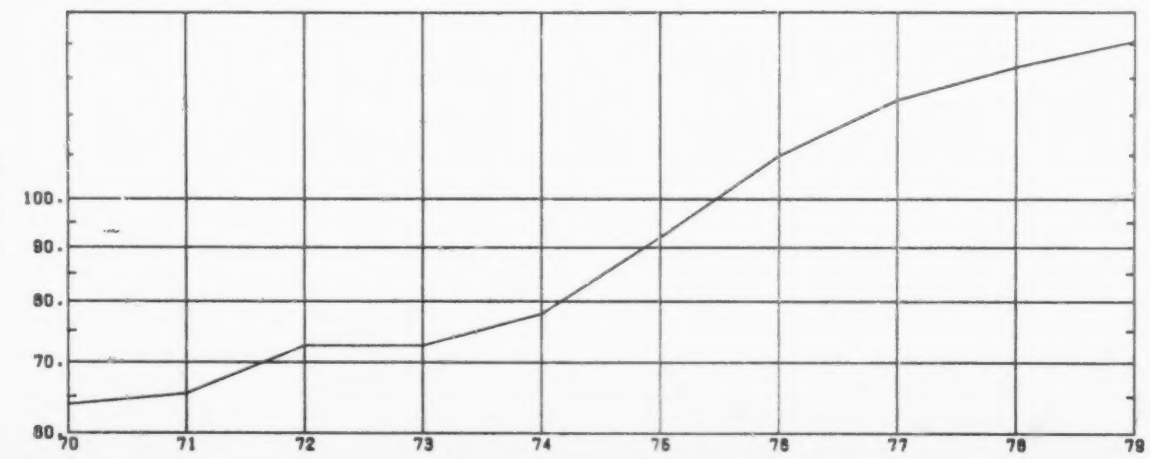


THERMS PER CUSTOMER



REVENUE PER THERM

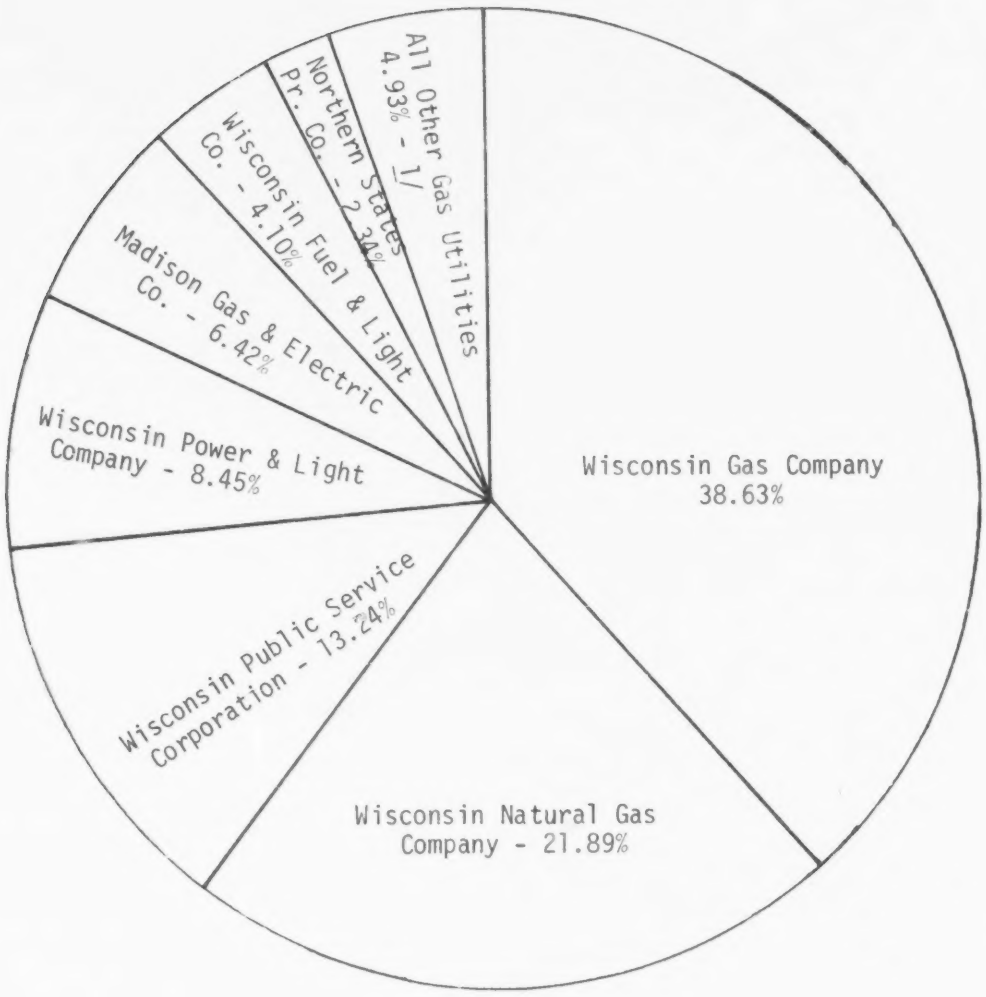
(RATIO SCALES)



REVENUE PER CUSTOMER

CHART 15

Revenues of Wisconsin Gas Utilities
In Percent of Total Sales to Ultimate Consumers
1979



1/	Wisconsin Southern Gas Co.	- 2.28%
	Lake Superior District Power Co.	- 0.92
	Superior Water, Light & Power Co.	- 0.78
	Midwest Natural Gas Co.	- 0.26
	City Gas of Antigo	- 0.28
	Class C Private	- 0.28
	Class D Private	- 2/
	Municipal	- 0.07
	North Central Public Service	- 0.06
	Total	4.93%

2/ There were no Class D for 1979.

TABLE 11 (CONCLUDED)

Utilities	Operating Revenue	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
New Holstein	$ 1,872,323	$ 1,747,718	$ 61,447	$ 33,351	$ 29,807	47,449	1,837	0	49,328
New Lisbon	560,625	375,345	63,281	31,285	90,714	10,034	675	808	9,825
New London	2,647,537	2,532,483	51,555	47,423	16,076	91,813	2,723	0	94,496
New Richmond	1,033,251	924,150	44,834	24,108	40,159	34,692	1,906	0	36,349
Oconomowoc	3,688,346	3,182,939	152,015	107,371	246,021	108,319	5,169	0	114,046
Oconto Falls	534,934	493,381	24,728	16,165	660	15,278	1,141	0	16,543
Pardeeville	395,743	356,463	15,432	7,452	16,396	9,455	862	82	9,991
Plymouth	3,917,291	3,313,252	182,741	89,559	331,739	93,934	5,046	0	101,232
Prairie du Sac	465,320	422,318	26,347	13,032	3,623	10,038	955	0	11,221
Reedsburg	2,436,026	2,340,620	53,054	38,216	4,136	69,291	2,486	0	72,324
Rice Lake	2,594,067	2,142,523	146,659	83,697	221,188	74,199	3,786	0	81,601
Richland Center	2,574,710	2,182,318	166,149	103,128	123,115	60,378	2,675	28,574	34,489
River Falls	2,416,086	1,747,946	199,010	110,959	358,171	54,938	3,396	19,931	37,575
Sauk City	822,836	763,056	29,947	14,935	14,898	19,234	1,203	0	20,508
Shawano	3,180,691	2,833,672	102,792	67,848	176,379	94,616	3,858	0	100,033
Sheboygan Falls	2,773,039	2,637,053	73,550	35,138	27,298	80,456	2,557	0	84,456
Stanger	618,088	584,665	14,866	7,092	12,925	19,362	725	0	20,045
Spooner	560,134	492,859	22,854	10,753	33,668	17,972	1,352	0	18,060
Stoughton	2,772,617	2,389,765	106,938	70,131	205,783	64,547	5,084	0	69,904
Sturgeon Bay	3,397,346	2,989,113	170,431	85,053	152,749	84,706	5,677	0	88,087
Sun Prairie	2,996,624	2,677,186	104,513	67,217	147,708	75,341	4,808	0	79,704
Two Rivers	2,683,142	2,173,857	106,745	74,386	328,154	63,541	5,479	0	67,847
Waterloo	873,273	805,018	22,214	16,466	29,575	26,059	1,192	0	27,926
Waunakee	1,148,940	1,035,002	46,032	20,472	47,434	27,497	1,488	0	30,102
Waupun	1,929,251	1,764,225	68,050	37,562	59,414	48,820	3,098	0	51,120
Westby	397,292	364,065	20,445	9,686	3,096	12,931	818	0	13,837
Whitehall	519,204	451,868	22,270	11,338	33,728	16,132	820	0	16,915
Wisconsin Dells	1,007,454	880,293	48,315	31,044	47,802	22,317	1,493	0	24,600
Wisconsin Rapids	5,980,412	5,566,555	221,746	173,065	19,046	153,017	9,926	0	164,460
Total Class A, B and C	$122,325,372	$108,389,379	$ 5,615,961	$ 3,487,726	$4,832,306	3,467,761	167,480	412,256	3,262,378
Class D									
21 Utilities	4,704,297	4,162,748	245,250	128,711	167,588	115,034	10,576	5,364	118,160
Grand Total	$127,029,669	$112,552,127	$ 5,861,211	$ 3,616,437	$4,999,894	3,582,795	178,056	417,620	3,380,538

1/ Includes Interdepartmental Sale and Sales for Resale.
2/ Excluding Off-Peak Water Heating and Area Lighting Customers.

Revenue and Consumption Ratios

The following table shows average revenue per therm, therms sold per customer and revenue per customer for each of the principle classes of service.

	1979	1978	1977
Revenue Per Therm			
Residential - General	35.5¢	31.1¢	29.4¢
Residential - Space Heating	29.9	26.3	24.4
Commercial and Industrial - Firm	25.4	21.3	19.3
Commercial and Industrial - Interruptible	23.4	19.8	17.9
Commercial and Industrial - Space Heating	26.9	23.6	21.7
Therms Per Customer			
Residential - General	397	428	422
Residential - Space Heating	1,539	1,577	1,545
Commercial and Industrial - Firm	49,575	44,346	40,479
Commercial and Industrial - Interrupt.	717,190	582,712	526,271
Commercial and Industrial - Space Heating	9,098	9,213	8,897
Revenue Per Customer			
Residential - General	141	133	124
Residential - Space Heating	461	415	377
Commercial and Industrial - Firm	12,579	9,460	7,824
Commercial and Industrial - Interrupt.	167,529	115,203	94,242
Commercial and Industrial - Space Heating	2,448	2,173	1,933

Revenue per therm increased for all customer classifications in 1979. Therms sold per customer increased only for Commercial and Industrial Firm and Interruptible use. All other classifications showed a decline. Revenue per customer increased for all classes. Chart 14 presents a comparison of average residential bills and consumption over a 10-year period. Although consumption has remained relatively constant in recent years the cost per therm and the total bills have increased sharply.

Gas Utility Plant Statistics

Table 14 supplies a summary of operating and plant statistics of the gas utility industry in Wisconsin. Over 99.9% of the 3,652 million therms delivered to mains in 1979 was natural gas. Almost 18,700 miles of main were in service at the close of 1979, exclusive of that owned by the pipeline companies. This represents a 1.2% increase over a year earlier.

Data on Individual Utilities

Individual company statistics for 1979 are presented in Table 15. Chart 15 shows a breakdown by company of total sales to ultimate consumers. The Wisconsin Gas Company accounted for 38.6% of total sales revenue from ultimate consumers and the five largest utilities made up 88.6% of the total.

TABLE 12

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN GAS UTILITIES 1/
1979-1977

	1979	1978	1977
Operating Revenues			
Sales to Ultimate Consumers	$973,569,574	$790,733,893	$684,430,104
Sales to Other Gas Utilities	2,436,277	2,376,068	2,486,960
Total Sales of Gas	$976,005,851	$793,109,961	$686,917,064
Other Operating Revenues	9,426,515	8,510,573	7,228,000
Total Operating Revenues	$985,432,366	$801,620,534	$694,145,064
Operating Expenses			
Production			
Liquified Petroleum Gas	$ 667,754	$ 313,835	$ 660,422
Purchased Gas - Natural	742,969,549	579,283,963	489,784,061
Storage	573,234	535,778	601,773
Total Production and Expense	$774,210,537	$580,133,576	$491,046,256
Transmission and Distribution	38,144,370	34,538,819	32,523,603
Customer Accounts	19,827,145	17,415,328	16,168,586
Customer Services	7,167,999	6,078,232	2,790,249
Sales Promotion	748,998	556,569	504,671
Administrative and General	35,398,498	31,174,007	26,540,535
Total Operation and Maintenance	$845,497,547	$669,896,531	$569,573,900
Depreciation 2/	37,690,000	34,654,460	33,407,237
Taxes Other than Income Taxes	16,187,926	17,029,659	16,573,159
Income Taxes	31,872,769	29,853,239	25,663,147
Total Operating Expenses	$931,248,242	$751,433,889	$645,217,443
Net Operating Revenues	$ 54,184,124	$ 50,186,645	$ 48,927,621

1/ Excluding out-of-state operations except where noted.
2/ Including amortization of plant acquisition adjustments, conversion costs and other utility plant not subject to charges for depreciation.

TABLE 13

SALES TO ULTIMATE CUSTOMERS BY CLASSES
WISCONSIN GAS UTILITIES 1/
1979-1977

	1979	1978	1977
Revenue from Gas Sold to Ultimate Consumers			
Residential - General	$ 18,972,830	$ 19,153,052	$ 18,357,254
Residential - Space Heating	363,066,244	314,912,019	278,847,760
Commercial and Industrial - Firm	146,037,983	120,335,823	101,027,862
Commercial and Industrial - Interr.	252,968,438	179,140,740	150,316,419
Commercial and Industrial - Space Htg.	177,432,355	149,864,605	131,346,983
Interdepartmental	15,091,724	7,327,654	4,533,826
Total	$ 973,569,574	$ 790,733,893	$ 684,430,104
Therms of Gas Sold to Ultimate Consumers			
Residential - General 2/	53,476,442	61,552,936	62,445,770
Residential - Space Heating	1,212,995,487	1,197,954,760	1,144,201,791
Commercial and Industrial - Firm	575,571,186	564,080,413	522,667,217
Commercial and Industrial - Interr.	1,082,957,321	906,116,778	839,402,971
Commercial and Industrial - Space Htg.	659,356,934	635,495,860	604,472,630
Interdepartmental	70,375,534	37,123,771	29,947,350
Total	3,654,732,904	3,402,324,518	3,203,137,729
Average Number of Customers			
Residential - General 2/	134,701	143,747	147,970
Residential - Space Heating	788,026	759,599	740,629
Commercial and Industrial - Firm	11,610	12,720	12,912
Commercial and Industrial - Interr.	1,510	1,555	1,595
Commercial and Industrial - Space Htg.	72,472	68,977	67,939
Interdepartmental	9	9	9
Total	1,008,328	986,607	971,054

1/ Excluding out-of-state operations.
2/ The decline in residential consumption and customers is due to the transfer of residential customers to the space heating classification when gas furnaces are installed.

TABLE 14

OPERATING AND PLANT STATISTICS
WISCONSIN GAS UTILITIES 1/
1979-1977

	1979	1978	1977
Disposition of Gas Delivered to Mains (Therms)			
Gas Sold in Wisconsin			
To Ultimate Consumers	3,654,732,904	3,402,324,518	3,203,137,729
To Other Gas Utilities	12,174,911	13,354,747	12,116,710
Total	3,666,907,815	3,415,679,265	3,215,254,439
Gas Used by Company	6,630,404	7,406,361	4,604,957
Total Sold and Used	3,673,538,219	3,423,085,626	3,219,859,396
Gas Unaccounted for	(20,566,925)	6,836,078	(11,670,231)
Gas Delivered to Mains	3,652,971,294	3,429,921,704	3,208,189,165
Percentage of Gas Unaccounted for	(0.56)%	0.20%	(0.36)%
Gas Produced (Therms)			
Liquefied Petroleum Gas	1,150,374	345,845	1,640,944
Natural Gas Purchased (Therms)			
From Michigan-Wisconsin Pipe Line Company	3,269,755,770	3,051,340,811	2,833,539,255
From Natural Gas Pipe Line Co.	78,654,914	81,935,868	73,117,087
From Midwest Gas Transmission Company	46,938,863	42,180,283	47,897,426
From Northern Natural Gas Company	256,033,355	257,388,173	252,482,134
Total Natural Gas Purchased	3,651,382,902	3,432,845,135	3,207,035,902
Total Gas Produced and Purchased	3,652,533,276	3,433,190,980	3,208,676,846
Net Inventory Change	438,018	(3,269,276)	(487,681)
Gas Delivered to Mains	3,652,971,294	3,429,921,704	3,208,189,165
Miles of Distribution and Transmission Mains 2/	18,711	18,496	18,307

1/ Excluding out-of-state operations.
2/ Not including transmission mains owned by pipeline companies.

TABLE 15

CONDENSED SUMMARY OF 1979 OPERATIONS
INDIVIDUAL GAS UTILITIES 1/

Utilities	Operating Revenue 2/	Operation & Maintenance	Depreciation & Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenues	Therms Sold 2/	Therms Produced	Therms Purchased 3/	Therms Produced and Purchased	Average Number of Customers 2/
Class A and B											
City Gas Co. of Antigo	$ 2,755,967	$ 2,577,677	$ 52,409	$ 31,009	$ 23,816	$ 71,056	10,625,277	0	10,600,581	10,600,581	3,039
Lake Superior District Power Co.	8,945,774	8,466,525	180,264	84,980	60,120	153,885	41,992,989	0	41,814,670	41,814,670	5,978
Madison Gas & Electric Co.	62,856,677	52,545,202	3,302,178	1,265,343	1,900,600	3,843,354	229,325,626	0	230,437,610	230,437,610	61,869
Midwest Natural Gas Co.	2,583,827	2,258,363	91,504	42,757	69,989	121,214	10,828,482	0	10,768,730	10,768,730	3,093
North Central Public Service Corp. 5/	513,298	429,674	6,337	2,701	11,670	62,916	2,024,648	272,992	1,440,148	1,713,140	5/
Northern States Power Co.	23,376,223	19,869,031	1,132,389	369,457	941,583	1,063,763	76,113,923	710,374	74,210,790	74,921,164	30,088
Superior Water, Light & Power Co.	7,760,398	6,845,515	318,338	148,346	171,950	276,249	30,359,742	10,262	31,355,997	31,366,259	8,798
Wisconsin Fuel & Light Co.	39,989,521	36,777,975	887,000	440,241	791,585	1,092,720	163,398,850	0	162,939,090	162,939,090	35,106
Wisconsin Gas Company	378,400,060	320,924,292	14,968,065	6,224,215	14,192,415	22,091,073	1,365,357,000	0	1,352,634,977	1,352,634,977	389,831
Wisconsin Natural Gas Company	215,822,522	185,630,199	7,975,222	3,468,081	6,453,755	12,295,265	815,005,619	0	813,849,699	813,849,699	200,440
Wisconsin Power & Light Co.	86,476,746	74,033,322	3,440,409	1,440,865	2,547,869	5,014,281	303,104,000	56,047	300,386,642	300,442,689	92,433
Wisconsin Public Service Corp.	130,139,896	112,069,320	4,421,243	2,154,400	4,532,359	6,962,374	519,094,333	0	519,869,772	519,869,772	139,104
Wisconsin Southern Gas Co.	22,415,402	20,006,116	817,184	451,106	106,732	1,034,264	85,375,140	67,035	87,040,876	87,107,911	34,822
Subtotal	$982,036,311	$842,433,411	$37,592,542	$16,123,501	$31,804,443	$54,082,414	3,652,605,629	1,116,710	3,637,349,582	3,638,466,292	1,004,601
Class C and D											
Elroy Gas, Inc.	$ 462,586	$ 428,298	$ 11,748	$ 10,454	$ (632)	$ 12,718	1,710,326	0	1,688,339	1,688,339	400
Muny Natural Gas Co. 4/	633,376	583,574	14,072	11,339	0	24,391	2,961,190	0	2,909,970	2,909,970	585
Natural Gas, Inc.	503,764	523,612	14,872	11,406	10,258	(56,384)	2,179,748	0	2,173,420	2,173,420	485
St. Croix Valley Natural Gas. Co.	1,796,329	1,528,652	56,766	31,226	58,700	120,985	7,450,922	33,664	7,275,520	7,309,184	2,259
Subtotal	$ 3,396,055	$ 3,064,136	$ 97,458	$ 64,425	$ 68,326	$ 101,710	14,302,186	33,664	14,047,249	14,080,913	3,729
Total All Utilities	$985,432,366	$845,497,547	$37,690,000	$16,187,926	$31,872,769	$54,184,124	3,666,907,815	1,150,374	3,651,396,831	3,652,547,205	1,008,330

( ) Denotes Negative Figure
1/ Data includes Wisconsin operations only.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Out-of-state sales by Lake Superior District Power Company and Wisconsin Public Service Corporation were subtracted from the therms purchased figure to give an estimated figure for Wisconsin only.
4/ Municipally owned.
5/ Sold to Wisconsin Gas Company on 2/14/79

TELEPHONE UTILITY SUMMARY

Comparative statistics of telephone utilities in Wisconsin during the period 1977-1979 are presented in this section. In addition, selected data over a 10-year period are presented in Chart 16. The coverage is summarized below:

Table 16 - Comparative Statement of Revenues and Expenses, Wisconsin Telephone Utilities, 1979-1977
Table 17 - Stations Served and Miles of Pole Lines, Wisconsin Telephone Utilities, 1979-1977
Table 18 - Condensed Summary of 1979 Operations, Individual Telephone Utilities

Chart 16 - Comparison of Revenues and Expenses, Wisconsin Telephone Utilities, 1970-1979

Telephone Utility Revenues and Expenses

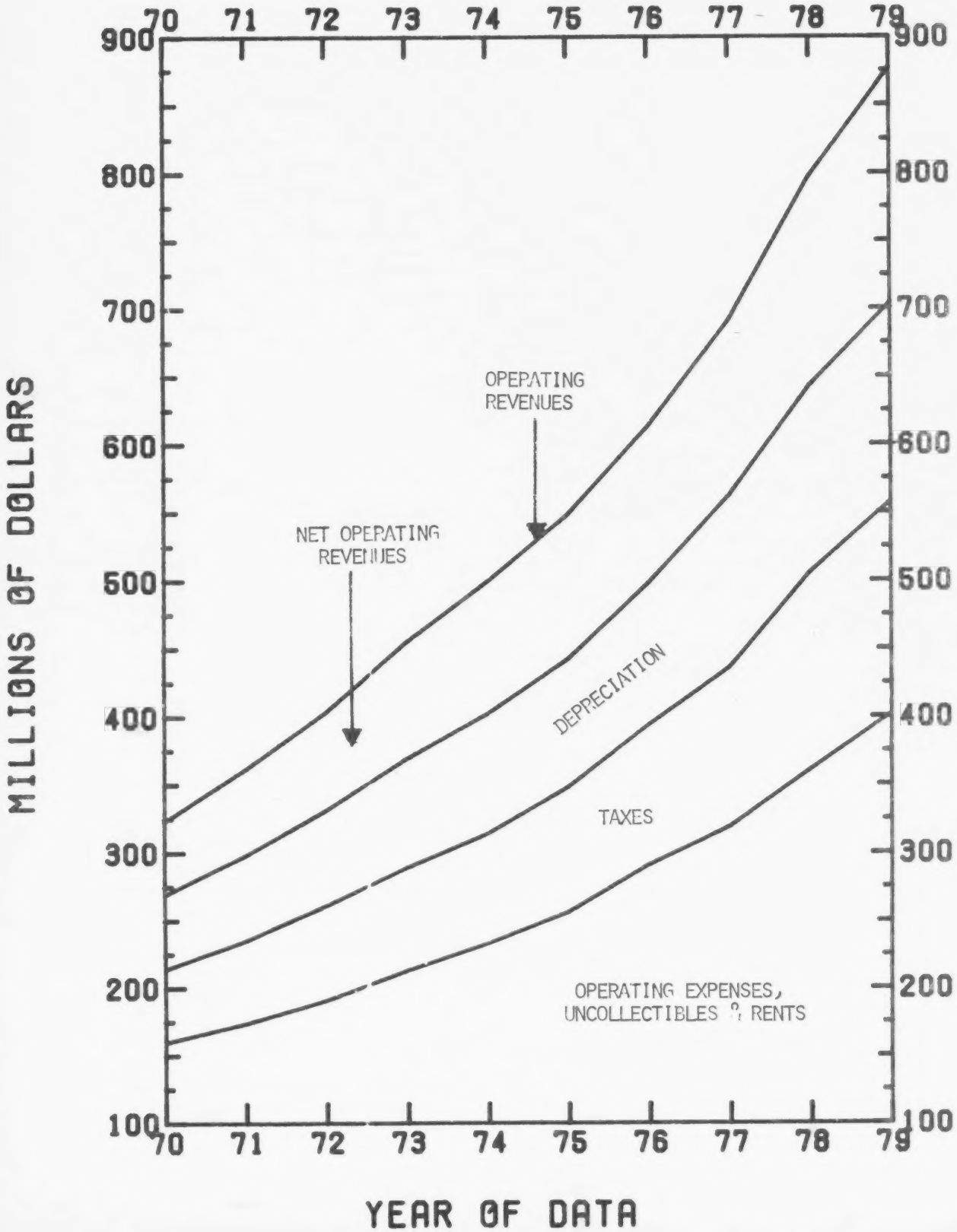
Table 16 shows that telephone revenues in Wisconsin rose over $78.9 million in 1979, a rise of 9.9%. Total operating expenses were up about $59.8 million and net operating revenue rose about $19.1 million or 12.4%.

Toll service revenues increased more rapidly than local service revenues during the year, rising 12.6% as compared to 6.8%. All major categories of expense rose during the year. General services and licenses showed the greatest increase with 19.9% followed by commercial expense with 16.8%. Traffic expense had the smallest increase, 3.2%.

Operating revenues, operating expenses, and net operating revenues are compared below on a per station basis over a 10-year period. These ratios are based on the average number of stations for each year.

Year	Total Operating Revenue Per Station	Total Operating Expense Per Station	Net Operating Revenue Per Station
1979	$ 251.35	$ 201.66	$ 49.69
1978	234.21	188.94	45.27
1977	210.18	170.96	39.22
1976	195.33	158.71	36.63
1975	183.44	147.81	35.63
1974	174.65	140.68	33.96
1973	166.43	135.04	31.39
1972	155.60	127.95	27.65
1971	146.19	120.80	25.40
1970	136.36	113.56	22.79

CHART 16
WISCONSIN TELEPHONE UTILITIES REVENUES AND EXPENSES



Station Data

Station data is presented in Table 17. About 3,488,000 stations were in service at the close of 1979, 2.40% more than in the preceding year. Extension stations accounted for 34.2% of the total and another 11.4% are connected to private branch or centrex exchange systems. Main stations totaled about 1,897,600 in 1979.

Station growth over the last ten years is analyzed below:

Index Numbers of Telephones in Service
1970=100

Year	Main	PBX	Extension	Total
1979	129	138	194	147
1978	127	137	188	144
1977	123	132	180	139
1976	119	127	167	133
1975	116	123	152	126
1974	113	120	140	121
1973	109	115	130	115
1972	106	110	120	110
1971	103	104	109	105
1970	100	100	100	100

Individual Companies

Table 18 presents individual company data for each of the 111 companies operating in the State. The Wisconsin Telephone Company alone accounted for 71.3% of the revenues and served 69.2% of the stations. General Telephone Company accounted for another 15.9% of the total revenues and served 14.5% of the stations.

United Telephone Company data was not included in the total data due to insufficient information filed by the utility for the calendar year 1979.

TABLE 16

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN TELEPHONE UTILITIES
1979-1977

	1979	1978	1977
Operating Revenues			
Exchange Service Revenue	$417,084,633	$390,621,740	$343,590,565
Toll Service Revenue	410,242,451	364,451,446	310,270,014
Miscellaneous Operating Revenue	49,486,876	42,796,879	36,769,881
Total Operating Revenues	$876,813,960	$797,870,065	$690,630,460
Operating Expenses			
Maintenance Expense	$150,694,090	$135,834,040	$119,852,214
Traffic Expense	40,372,609	39,139,053	37,977,046
Commercial Expense 1/	82,177,215	70,341,531	59,633,930
General and Miscellaneous Expense	116,571,604	106,098,072	93,042,565
General Services and Licenses	12,076,853	10,072,566	8,485,557
Total Operation and Maintenance	$401,892,371	$361,485,262	$318,991,312
Depreciation and Amortization	146,001,613	136,697,870	126,034,074
Taxes Other than Income Taxes	73,583,278	67,197,524	57,173,320
Income Taxes	82,011,064	78,275,976	59,565,493
Total Operating Expenses	$703,488,326	$643,656,632	$561,764,199
Net Operating Revenue	$173,325,634	$154,213,433	$128,866,261

1/ Includes uncollectible bills.

TABLE 17

STATIONS SERVED BY WISCONSIN
TELEPHONE COMPANIES
1979-1977

	December 31, 1979	December 31, 1978	December 31, 1977
Main Stations 1/	1,897,686	1,860,527	1,801,281
Centrex and PBX Stations	399,102	395,086	382,067
Extension Stations	1,191,688	1,151,041	1,102,596
Total Stations	3,488,476	3,406,654	3,285,944

1/ Includes pay, private line and mobile stations.

TABLE 18

A SUMMARY OF 1979 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
ALMOND TELEPHONE COMPANY	158,034	66,936	28,672	9,525	15,614	120,748	37,287	940
AMERY TELEPHONE COMPANY	1,208,708	409,575	348,776	90,236	90,189	938,776	269,932	9,000
AMHERST TELEPHONE COMPANY	699,237	223,294	198,040	41,103	25,973	488,418	210,820	3,010
BADGER TELEPHONE COMPANY INC	363,025	161,156	87,310	20,789	0	269,255	93,771	1,710
BADGER STATE TELEPHONE COMPANY, INC	1,160,220	452,777	255,056	67,517	136,956	912,307	247,913	5,778
BALDWIN TELEPHONE EXCHANGE	654,888	207,887	156,119	46,826	72,036	482,868	172,020	3,623
BAYLAND TELEPHONE INC	283,553	122,062	67,387	18,975	10,874	219,298	64,255	1,302
BELMONT TELEPHONE COMPANY	174,292	70,991	35,320	7,543	6,875	120,729	53,563	1,043
BERGEN TELEPHONE COMPANY	38,910	15,815	9,696	1,704	2,386	29,601	9,219	273
BLACK EARTH TELEPHONE COMPANY	268,786	125,982	49,039	18,531	29,353	223,806	44,980	1,541
BLOOMER TELEPHONE COMPANY	434,975	136,102	92,583	27,048	52,673	318,406	116,569	3,387
BONDUEL TELEPHONE COMPANY	360,290	166,689	62,613	20,333	48,207	297,932	62,359	2,228
BRUCE TELEPHONE COMPANY, INC	204,672	114,011	50,681	20,207	11,028	196,827	87,845	1,551
BURLINGTON BRIGHTON & WHEATLAND TEL	759,730	314,038	130,008	49,631	102,834	596,601	173,129	3,823
CASCO TELEPHONE COMPANY	222,095	106,140	76,627	13,179	1,753	197,699	24,996	1,347
CENCOM OF WISCONSIN, INC	4,281,849	1,790,960	903,028	335,903	271,720	3,301,611	980,238	21,533
CENTRAL STATE TELEPHONE COMPANY	2,191,641	864,428	439,267	160,412	188,046	1,652,153	539,488	8,658
CHEQUAMEGON TELEPHONE COOP INC	1,711,966	673,924	397,177	144,935	0	1,216,036	495,930	6,514
CHIBARDUN TELEPHONE COOPERATIVE INC	1,104,108	421,232	336,178	83,989	0	841,399	162,713	5,444
CHIPPEWA COUNTY TELEPHONE INC	580,998	241,053	131,164	30,537	57,680	460,434	120,564	3,394
CITIZENS TELEPHONE COOPERATIVE INC	304,379	111,944	92,979	19,579	0	224,503	79,876	2,030
CLEAR LAKE TELEPHONE COMPANY, INC	287,974	133,436	82,140	17,747	-1,583	231,740	56,234	1,618
COCHRANE COOPERATIVE TELEPHONE CO	185,592	82,242	38,792	10,761	0	131,795	53,797	1,321
COLOMA TELEPHONE COMPANY	143,746	43,033	30,035	8,243	9,790	91,100	52,646	671
COON VALLEY FARMERS TELEPHONE CO	260,377	118,509	66,385	13,705	10,160	208,758	51,619	2,384
CRANDON TELEPHONE COMPANY	544,943	199,500	128,048	37,576	34,617	399,742	145,202	2,403
CREAM VALLEY TELEPHONE COMPANY	659,372	228,663	165,938	39,815	86,923	521,339	138,033	2,804
CUBA CITY TELEPHONE EXCHANGE COMPANY	413,706	146,449	66,278	27,713	41,630	282,069	131,637	2,246
DICKEYVILLE TELEPHONE CORPORATION	192,686	99,430	52,306	7,889	2,951	162,586	30,101	1,349
DODGE COUNTY TELEPHONE COMPANY	276,817	118,956	56,551	16,027	31,851	223,384	53,433	1,327
FAIRWATER BRANDON ALTO TELEPHONE CO	307,424	128,487	74,842	21,062	7,374	231,765	75,659	1,615
FARMERS INDEPENDENT TELEPHONE CO	443,483	159,520	96,688	27,206	51,527	334,942	108,541	2,775
FARMERS TELEPHONE COMPANY	1,360,928	428,078	334,182	123,110	115,611	1,000,981	359,947	7,625
FENNIMORE TELEPHONE COMPANY	364,535	192,277	71,653	24,149	25,572	313,651	50,884	2,698
FOOTVILLE TELEPHONE COMPANY	209,958	93,673	52,319	13,041	2,421	161,454	48,503	1,167

TABLE 1R

A SUMMARY OF 1979 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
OGEMA TELEPHONE COMPANY	195,140	103,843	50,382	10,298	8,782	173,304	21,735	1,108
OSCEOLA TELEPHONE COMPANY	829,581	422,894	132,470	37,350	98,271	690,992	138,619	3,011
PEOPLES TELEPHONE CO	468,109	194,070	113,187	21,116	61,805	390,268	77,841	2,374
PEOPLES TELEPHONE CO OF RIO, INC.	1,071,845	507,673	218,526	81,898	85,434	893,532	178,313	7,300
PLATTEVILLE TELEPHONE COMPANY	3,075,634	1,437,611	545,159	304,240	156,920	2,444,930	630,704	9,002
POPLAR TELEPHONE COMPANY INC	178,121	79,792	32,471	7,707	21,636	141,607	36,514	785
INDIANHEAD TELEPHONE CO.	608,807	171,154	152,856	38,900	95,925	457,835	150,969	1,717
PRICE COUNTY TELEPHONE COMPANY	971,161	317,703	213,190	74,796	123,650	729,340	241,821	3,749
RHINELANDER TELEPHONE COMPANY	2,665,127	972,305	446,531	221,563	326,562	1,966,962	698,165	13,232
RIB LAKE TELEPHONE COMPANY	231,342	116,921	50,302	13,958	5,815	188,996	42,346	1,247
RICHLAND GRANT TELEPHONE COOPERATIVE	517,665	284,750	143,248	32,722	0	460,720	56,945	2,196
ROCK RIVER TELEPHONE COMPANY	387,923	171,416	107,236	25,513	2,173	306,337	81,585	2,007
ST CROIX TELEPHONE COMPANY	1,280,595	504,280	321,709	119,087	80,576	1,025,652	254,943	7,153
SCANDINAVIA TELEPHONE COMPANY	535,222	180,711	111,155	29,333	87,951	409,260	125,962	2,233
SHARON TELEPHONE COMPANY	242,224	138,496	35,470	19,051	11,602	204,619	37,606	1,398
SHELL LAKE TELEPHONE COMPANY	329,377	167,262	112,479	30,116	37,788	347,644	81,732	2,432
SIREN TELEPHONE COMPANY INCORPORATED	279,722	110,928	52,703	18,913	33,114	215,218	64,504	1,733
SOLON SPRINGS TELEPHONE COMPANY	748,078	318,523	176,003	46,247	68,862	609,735	138,343	3,056
SOMERSET TELEPHONE COMPANY, INC	245,913	107,914	46,471	17,539	11,215	183,138	62,775	1,307
SOUTHEAST TELEPHONE CO OF WISC, INC	1,100,600	495,156	320,233	78,502	15,832	909,724	190,876	7,545
SPRING VALLEY TELEPHONE COMPANY, INC	175,746	76,382	24,952	9,357	15,925	126,617	49,130	1,195
STATE LONG DISTANCE TELEPHONE CO	1,655,947	836,884	283,149	141,257	196,594	1,257,883	398,063	8,681
STOCKBRIDGE & SHERWOOD TELEPHONE CO	537,804	232,500	120,781	30,815	67,618	451,715	86,090	2,814
SULLIVAN TELEPHONE COMPANY	372,759	139,339	86,488	24,993	32,292	283,213	89,546	2,061
TENNEY TELEPHONE COMPANY	222,230	84,831	36,217	13,378	18,447	162,973	59,258	1,298
THORP TELEPHONE COMPANY	569,132	310,353	130,944	42,243	11,496	495,037	74,095	2,807
TRI-COUNTY TELEPHONE COOP, INC	774,058	367,865	222,999	52,225	0	643,089	130,969	3,759
TURTLE LAKE TELEPHONE COMPANY INC	257,342	129,316	60,864	16,150	-520	205,810	51,532	1,296
UNION TELEPHONE COMPANY	366,219	143,751	123,966	27,964	6,352	301,533	64,687	2,182
UNIVERSAL TEL CO OF NORTHERN WIS INC	1,218,093	410,859	234,231	95,635	138,246	878,971	339,122	3,553
URBAN TELEPHONE CORPORATION	3,767,090	1,611,052	664,795	330,947	347,836	2,954,630	812,460	22,140
VALDERS TELEPHONE COMPANY	483,370	221,690	104,512	25,331	51,220	402,752	80,618	2,026
VERNON TELEPHONE COOPERATIVE	1,035,263	485,573	307,637	70,141	0	863,351	171,913	7,868
VIROQUA TELEPHONE COMPANY	1,201,962	610,513	221,707	107,296	92,828	1,034,343	167,619	4,514
WAUNAKEE TELEPHONE COMPANY INC	796,992	365,753	135,139	46,292	78,572	625,756	171,235	4,623

TABLE 1A

A SUMMARY OF 1979 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPR. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
WAYSIDE TELEPHONE COMPANY	257,225	131,554	71,585	15,374	859	219,372	37,853	1,771
WEST WISCONSIN TELEPHONE COOP, INC	876,853	413,747	273,151	60,835	0	747,732	129,121	4,437
WEYAUWEGA TELEPHONE COMPANY	718,333	291,202	190,350	46,472	47,643	575,666	142,677	4,369
WISCONSIN TELEPHONE COMPANY	625,229,785	300,239,607	87,760,931	53,158,621	64,028,762	506,095,931	119,133,853	2,316,821
WITTENBERG TELEPHONE COMPANY	323,553	172,037	70,086	20,072	2,919	265,713	57,839	2,313
WOOD COUNTY TELEPHONE COMPANY	5,448,063	2,280,205	1,134,602	484,800	388,811	4,288,604	1,160,359	20,715
TOTAL	876,813,960	401,892,372	146,001,613	73,583,278	82,011,064	703,488,326	173,325,634	2,388,476

WATER UTILITIES

Comparative statistics of water utilities operating in Wisconsin during the period from 1977 through 1979 are presented in this section. Chart 17 shows a summary of the income acount over a ten-year period. The coverage is summarized below.

Table 19 - Comparative Statement of Revenues and Expenses Wisconsin Water Utilities, 1979-1977
Table 20 - Operating and Plant Statistics, Wisconsin Water Utilities, 1979-1977
Table 21 - Condensed summary of 1979 Operations, Individual Water Utilities

Chart 17 - Comparison of Revenues and Expenses, Wisconsin Water Utilities, 1970-1979.

Water Utility Revenues and Expenses

Chart 17 shows that revenues and expenses (with the exception of taxes) have advanced steadily over the past nine years. Taxes are up only 5% for the period while operation and maintenance expenses are up 114%, depreciation rose 84%, operating revenues rose 79% and net operating revenue increased 73%.

Revenues increased 6.6% and operating expenses were up 6.7% during 1979. Net operating revenue increased 5.6%.

Operating and Plant Statistics

The total number of water customers served rose 1.5% in 1979 while gallons of water pumped were up 6.1%. Electric pumpage accounted for 99.9% of the total and the remainder was by internal combustion engine. Total miles of main increased 5.2%.

Data on Individual Utilities

Table 21 shows selected data on each Class A and B water utility, all but three of which are municipally owned. The table also shows totals for the smaller utilities. Municipal utilities accounted for 96.7% of the total operating revenue and served 97.0% of the customers. Superior, served by Superior Water, Light, and Power Company, and Beloit and Ripon served by Wisconsin Power and Light Company, were the largest cities served by private utilities.

CHART 17
WISCONSIN WATER UTILITIES REVENUES AND EXPENSES

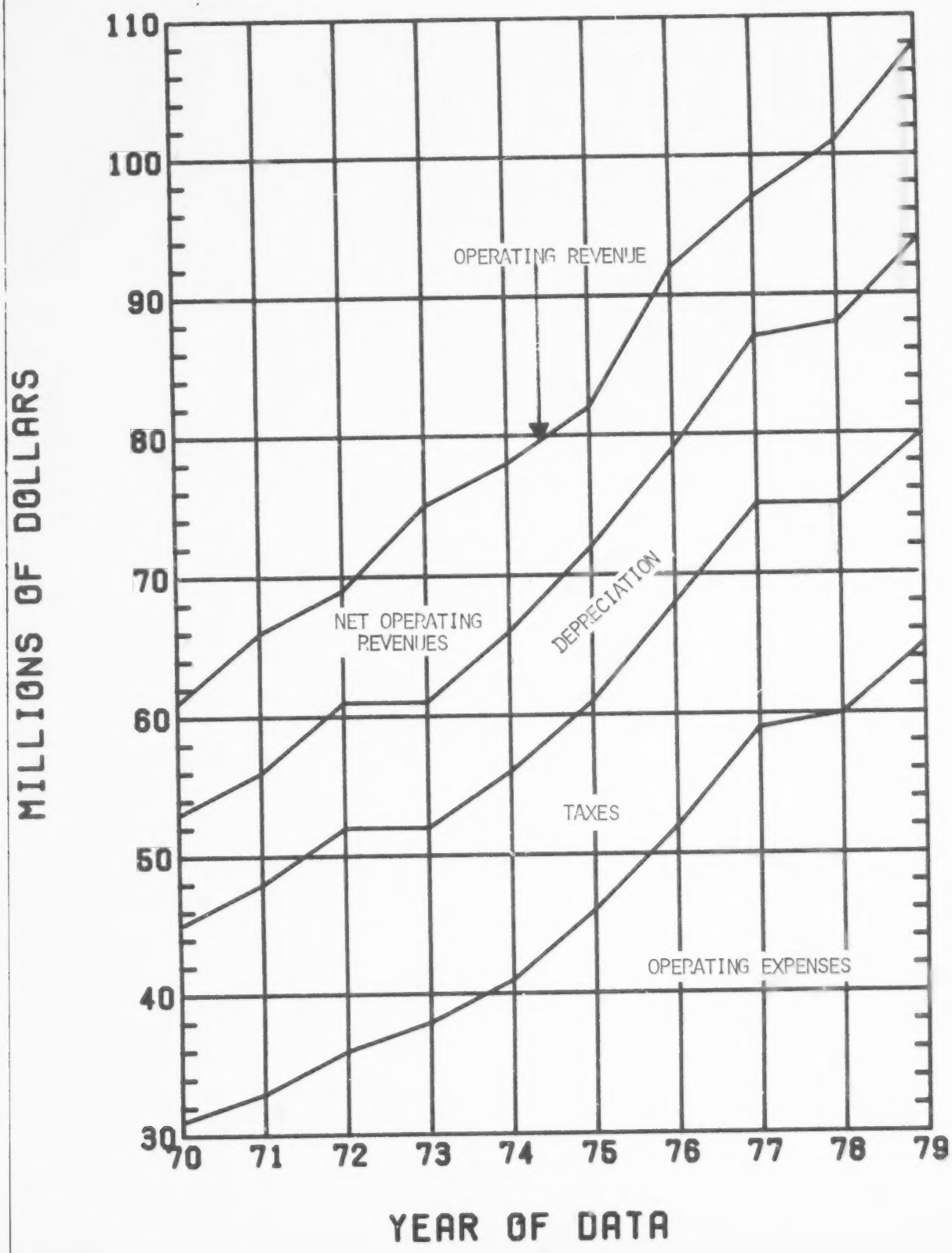


TABLE 19

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1979-1977

	1979	1978	1977
All Water Utilities			
Operating Revenues			
Sales to General Consumers	$ 78,615,360	$ 73,983,768	$ 71,574,448
Interdepartmental Sales	62,086	72,650	75,813
Sales to Other Water Utilities	3,188,704	2,993,656	3,141,508
Fire Protection and Other Municipal Sales	23,968,641	22,469,917	21,155,6[illegible]
Total Sales of Water	$105,834,791	$ 99,519,991	$ 95,947,405
Miscellaneous Operating Revenues	1,836,833	1,494,663	1,327,716
Total Operating Revenues	$107,671,624	$101,014,654	$ 97,275,121
Operating Expenses			
Source of Water Supply (Excluding Purchases)	$ 890,219	$ 941,194	$ 830,686
Water Purchases	3,666,573	3,485,928	3,601,440
Pumping Expenses	16,074,485	14,488,061	13,715,683
Purification	9,377,686	8,279,916	7,537,041
Total Production Expense	$ 30,008,963	$ 27,195,099	$ 25,684,850
Transmission and Distribution	16,675,448	15,028,839	16,462,748
Customer Accounts	4,688,794	4,509,002	4,370,820
Sales	11,210	853	924
Administrative and General Expenses	13,971,965	13,044,186	12,022,269
Total Operation and Maintenance Expense	$ 65,356,380	$ 59,777,979	$ 58,541,611
Depreciation and Amortization	13,924,258	13,065,901	12,318,080
Taxes Other than Income Taxes	14,617,493	15,076,541	15,821,619
Income Taxes	87,021	132,028	239,831
Total Operating Expenses	$ 93,985,152	$ 88,052,449	$ 86,921,141
Net Operating Revenues	$ 13,686,472	$ 12,962,205	$ 10,353,980

TABLE 19 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1979-1977

	1979	1978	1977
Private Water Utilities			
Total Operating Revenues	$ 3,585,103	$ 3,355,532	$ 3,142,106
Operation and Maintenance	$ 2,285,044	$ 1,938,529	$ 1,771,555
Depreciation and Amortization	345,281	312,896	292,069
Taxes Other than Income Taxes	325,431	329,105	293,322
Income Taxes	87,021	132,028	239,831
Total Operating Expenses	$ 3,042,777	$ 2,712,558	$ 2,596,777
Net Operating Revenues	$ 542,326	$ 642,974	$ 545,329
Municipal Utilities			
Total Operating Revenues	$104,086,521	$ 97,659,122	$ 94,133,015
Operation and Maintenance	$ 63,071,336	$ 57,839,450	$ 56,770,056
Depreciation and Amortization	13,578,977	12,753,005	12,026,011
Taxes Other than Income Taxes	14,292,062	14,747,436	15,528,297
Total Operating Expenses	$ 90,942,375	$ 85,339,891	$ 84,324,364
Net Operating Revenues	$ 13,144,146	$ 12,319,231	$ 9,808,651

TABLE 20

OPERATING AND PLANT STATISTICS
WISCONSIN WATER UTILITIES
1979-1977

	1979	1978	1977
Average Number of Customers			
Residential	824,082	815,684	802,463
Commercial	78,372	73,037	71,018
Industrial	7,125	7,091	7,083
Total	909,579	895,812	880,564
Private Utilities	27,112	27,194	26,951
Municipal Utilities	882,467	868,618	853,613
Total	909,579	895,812	880,564
Gallons of Water Pumped Into Distribution System (000 Omitted)			
Electric Power	207,405,924	195,390,763	200,800,938
Internal Combustion	8,650	27,886	22,383
Total	207,414,574	195,418,654	200,823,321
Private Utilities	5,217,522	5,063,173	5,274,090
Municipal Utilities	202,197,052	190,355,481	195,549,231
Total	207,414,574	195,418,654	200,823,321
Miles of Distribution Main on December 31			
Private Utilities	366	370	367
Municipal Utilities	12,945	12,278	12,123
Total	13,311	12,648	12,490

TABLE 21

CONDENSED SUMMARY OF 1979 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenue	Average Number of Customers 1/
Private Utilities								
Class A and B								
Lake Superior District Power Co.(LSDP)	$ 76,957	$ 50,903	$ 5,738	$ 11,067	$ (1,700)	$ 66,008	$ 10,949	280
Superior Water, Light & Power Co. (SWLP)	1,257,004	980,392	80,911	119,857	(47,966)	1,133,194	123,810	9,[illegible]
Wisconsin Power & Light Co. (WPL)	2,055,171	1,125,938	231,455	177,239	133,454	1,668,086	387,085	15,606
Subtotal	$ 3,389,132	$ 2,157,233	$ 318,104	$ 308,163	$ 83,788	$ 2,867,288	$ 521,844	25,551
13 Class D Water Utilities 2/	195,971	127,811	27,177	17,268	3,233	175,489	20,482	1,765
Total Private Utilities	$ 3,585,103	$ 2,285,044	$ 345,281	$ 325,431	$ 87,021	$ 3,042,777	$ 542,326	27,316
Municipal Utilities								
Class A								
Appleton	$ 2,066,222	$ 1,360,373	$ 222,736	$ 253,560	$ 0	$ 2,036,669	$ 29,553	19,119
Cudahy	915,764	494,401	123,304	136,060	0	753,765	161,999	5,091
Eau Claire	1,715,120	1,043,441	190,091	254,966	0	1,488,498	226,622	15,462
Fond Du Lac	992,559	696,713	115,507	126,923	0	939,143	53,416	11,893
Glendale	737,235	411,335	112,914	79,608	0	603,857	133,378	4,537
Green Bay	3,183,320	1,547,555	368,071	318,191	0	2,233,817	949,503	27,688
Janesville	828,000	599,179	72,514	43,723	0	715,416	112,584	16,246
Kaukauna	360,723	201,894	65,107	61,478	0	328,479	32,244	3,675
Kenosha	2,619,704	1,558,217	336,927	324,572	0	2,219,716	399,988	22,824
La Crosse	1,205,176	836,008	142,500	169,714	0	1,148,222	56,954	14,548
Madison	4,206,443	2,696,356	550,283	674,000	0	4,122,639	83,804	43,732
Manitowoc	1,435,954	666,802	173,590	177,815	0	1,018,207	417,747	10,658
Marinette	698,560	329,303	81,798	78,767	0	489,868	208,692	4,333
Marshfield	520,288	340,095	58,209	74,005	0	472,309	47,979	5,683
Milwaukee	24,241,610	13,685,805	2,382,639	3,434,132	0	19,502,576	4,739,034	157,617
Neenah	1,076,319	580,309	118,561	135,462	0	834,332	241,987	7,744
Oshkosh	1,547,820	944,117	251,324	189,410	0	1,384,851	162,969	16,317
Racine	2,754,167	1,973,365	249,266	328,050	0	2,550,681	203,486	27,377
Sheboygan	1,268,940	867,211	152,529	181,208	0	1,200,948	67,992	15,783
South Milwaukee	626,173	509,627	60,731	84,625	0	654,983	(28,810)	5,784
Waukesha	2,166,889	1,253,976	233,685	233,099	0	1,720,760	446,129	12,526
Wausau	902,634	709,285	142,800	143,374	0	995,459	(92,825)	11,517
Wauwatosa	1,968,672	1,593,766	229,622	214,289	0	2,037,677	(69,005)	15,562
West Allis	2,229,268	1,806,131	187,543	291,050	0	2,284,724	(55,456)	18,843
Wisconsin Rapids	800,546	527,546	89,475	120,924	0	737,945	62,601	6,459
Subtotal	$61,068,106	$37,634,810	$ 6,711,726	$ 8,129,003	$ 0	$52,475,541	$ 8,592,565	501,018

TABLE 14

A SUMMARY OF 1979 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	TOTAL STATIONS CLOSE OF YEAR
FORESTVILLE TELEPHONE COMPANY, INC	337,984	156,555	79,797	17,882	26,865	281,099	56,885	2,[illegible]
FREDERIC TELEPHONE COMPANY	1,040,042	491,980	309,986	94,320	39,253	935,538	104,503	2,100
GENERAL TELEPHONE COMPANY OF WISC	139,119,798	55,277,968	32,856,470	11,711,073	9,960,123	109,805,634	29,314,164	505,756
GLEASON TELEPHONE COMPANY INC	102,947	66,344	16,864	3,940	0	87,157	15,790	609
GREENWOOD TELEPHONE COMPANY	349,778	157,580	66,640	21,100	42,467	287,856	61,922	1,881
HAGER CITY TELEPHONE COMPANY	432,481	190,495	140,901	25,932	258	356,586	65,895	2,211
HAMMOND TELEPHONE COMPANY	169,718	100,522	27,317	8,016	5,867	142,322	27,392	1,059
HEADWATERS TELEPHONE COMPANY	1,124,094	400,747	267,601	83,347	110,967	862,662	261,431	3,823
HILLSBORO TELEPHONE COMPANY INC	394,270	139,093	106,601	25,108	17,128	287,930	106,339	1,894
LA CROSSE TELEPHONE CORPORATION	12,202,656	5,838,816	2,665,521	1,093,888	344,557	9,942,782	2,259,874	32,607
LAKEFIELD TELEPHONE COMPANY	275,318	112,643	64,371	15,722	11,850	204,584	70,728	1,719
LAKELAND TELEPHONE COMPANY	677,420	250,970	135,123	41,119	122,474	549,686	127,734	2,727
LAKESHORE TELEPHONE COMPANY	271,530	137,111	75,732	16,583	1,900	230,925	40,605	1,038
LARSEN-READFIELD TELEPHONE COMPANY	323,158	154,229	76,209	17,508	18,352	266,297	56,860	2,582
LA VALLE TELEPHONE COOPERATIVE, INC	274,572	128,848	91,355	15,078	0	235,281	39,291	1,789
LEMONWEIR VALLEY TELEPHONE COMPANY	487,406	191,826	87,076	31,995	48,879	359,776	127,630	2,913
LUCK TELEPHONE COMPANY	351,322	127,521	93,343	20,780	27,213	268,858	82,465	2,207
MADELINE ISLAND TELEPHONE COMPANY	44,270	31,209	6,229	2,831	317	40,586	3,683	316
MANAWA TELEPHONE COMPANY, INC	508,075	198,480	120,088	32,749	22,282	373,608	134,467	2,411
MAPLE TELEPHONE COOPERATIVE, INC	63,035	30,489	12,103	4,010	0	46,603	16,433	380
MARQUETTE ADAMS TELEPHONE COOP INC	591,285	209,754	156,072	35,733	0	401,560	189,725	2,866
MID-PLAINS TELEPHONE INCORPORATED	3,752,842	1,279,139	1,001,609	316,367	300,641	2,897,756	855,086	10,336
MIDWAY TELEPHONE COMPANY	2,130,083	618,120	357,876	140,172	281,041	1,407,108	722,973	7,053
MILLTOWN MUTUAL TELEPHONE COMPANY	298,573	139,285	90,971	19,183	4,276	253,715	44,858	2,008
MONDOVI TELEPHONE COMPANY	525,126	233,075	140,821	34,878	11,062	419,835	105,291	2,982
MONROE COUNTY TELEPHONE COMPANY	2,089,711	1,150,848	357,978	191,566	45,249	1,745,641	344,070	11,519
MOSEL CENTERVILLE TELEPHONE COMPANY	801,756	344,314	152,732	50,801	92,466	640,313	161,442	3,833
MOSINEE TELEPHONE COMPANY	739,779	378,219	200,222	56,233	13,730	648,404	101,375	3,992
MOUNT HOREB TELEPHONE COMPANY	657,596	286,230	112,155	43,202	45,305	486,891	170,705	3,147
MOUNT VERNON TELEPHONE COMPANY	1,544,836	724,979	283,046	109,121	140,386	1,257,533	287,303	7,803
NELSON TELEPHONE COOPERATIVE	873,347	357,991	228,751	58,369	0	645,110	228,237	3,784
NIAGARA TELEPHONE COMPANY	614,213	357,127	99,194	43,130	16,061	515,512	98,701	3,030
NORTHEAST TELEPHONE COMPANY	1,073,681	364,862	261,279	68,710	88,912	783,764	289,917	5,855
NORTH-WEST TELEPHONE COMPANY	17,415,563	6,323,025	3,219,566	1,451,749	875,533	12,869,872	4,545,690	71,724
NOVYS TELEPHONE COMPANY	73,705	35,142	13,004	5,912	0	54,059	19,646	648

TABLE 21 (Concluded)

CONDENSED SUMMARY OF 1979 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenue	Average Number of Customers 1/
Municipal Utilities (Continued)								
Class B								
Allouez	$ 395,635	$ 243,841	$ 68,159	$ 59,329	$ 0	$ 371,329	$ 24,306	4,554
Ashland	325,223	273,684	32,469	52,730	0	358,883	(33,660)	2,840
Beaver Dam	526,961	319,460	50,981	53,944	0	424,385	102,576	5,144
Brown Deer	491,277	327,817	76,230	66,574	0	470,621	20,656	3,199
Cedarburg	263,006	151,605	33,175	34,565	0	219,345	43,661	2,597
Chippewa Falls	600,813	340,902	68,871	89,302	0	499,075	101,738	3,867
De Pere	297,216	204,214	50,339	51,015	0	305,568	(8,352)	4,811
Greendale	514,665	362,592	50,970	67,680	0	481,242	33,423	4,511
Menasha	829,781	665,512	82,952	91,882	0	840,346	(10,565)	4,799
Menasha, Twn. S.D. #4	475,165	420,472	103,436	0	0	523,908	(48,743)	3,368
Menomonee Falls	517,157	353,455	86,929	101,305	0	541,989	(24,832)	4,655
New London	165,050	85,694	18,781	24,573	0	129,048	36,002	2,169
Oak Creek	988,000	354,963	239,051	180,009	0	774,023	213,977	2,383
Oconomowoc	601,854	240,739	69,016	67,878	0	377,633	224,221	3,008
Platteville	326,267	215,242	67,982	39,120	0	322,344	3,923	2,501
Plymouth	250,588	161,124	17,790	24,622	0	203,536	47,052	2,095
Port Washington	383,480	263,159	98,423	82,320	0	443,902	(60,422)	2,654
River Falls	194,658	139,388	26,306	21,551	0	187,245	7,413	2,032
Shawano	209,042	109,367	21,024	29,477	0	159,868	49,174	2,733
Shorewood	390,439	333,074	14,531	19,220	0	366,825	23,614	3,554
Stevens Point	595,479	326,062	66,038	94,451	0	486,551	108,928	6,589
Sturgeon Bay	338,562	192,086	54,009	65,423	0	311,518	27,044	2,986
Sun Prairie	318,130	197,236	38,360	47,784	0	283,380	34,750	3,530
Two Rivers	531,401	328,368	59,557	70,004	0	457,929	73,472	4,549
Waterloo	49,079	36,061	7,232	8,970	0	52,263	(3,184)	1,076
Watertown	575,077	271,501	60,733	69,268	0	401,502	173,575	5,623
Waupaca	405,076	174,730	46,449	39,269	0	210,448	194,628	1,725
West Bend	450,193	286,402	102,286	94,904	0	483,592	(33,399)	5,885
Whitefish Bay	351,306	202,011	65,231	41,221	0	308,463	42,843	4,786
Subtotal	$ 12,360,580	$ 7,530,761	$ 1,777,310	$ 1,668,690	$	$10,996,761	$ 1,363,819	104,223
Class C 116 Utilities	18,755,334	10,[illegible],272	2,872,469	2,689,535	0	16,548,276	2,207,058	168,989
Class D 352 Utilities	11,902,501	6,929,493	2,217,472	1,774,832	0	10,921,797	980,704	119,168
Total Municipal Utilities	$104,086,521	$63,071,336	$ 13,578,977	$ 14,292,062	$ 0	$90,942,375	$ 13,144,146	893,398
Total All Utilities	$107,671,624	$65,356,380	$ 13,924,258	$ 14,617,493	$ 87,021	$93,985,152	$ 13,686,472	920,714

1/ Includes fire protection, public authorities, interdepartmental and other water utility customers.
2/ There were no private Class C utilities in 1979.
( ) Denotes negative figure.

STEAM AND HOT WATER HEATING UTILITY SUMMARY

As shown in Table 22, steam and hot water heating utility operations in Wisconsin are not very extensive. Only three utilities rendered this service in 1979.

The Wisconsin Electric Power Company, operating in the city of Milwaukee, has by far the largest heating utility in the State, serving 585 customers at the close of 1979. Its net operating revenue for the year was $731,814.

Other communities in which heating service was supplied during the year included Waterloo, served by a municipal utility, and Rice Lake, served by Rice Lake Steam Corporation. Rice Lake showed a gain of $10,015 while Waterloo had a loss of $8,205 for 1979.

TABLE 22

COMPARATIVE STATEMENT OF REVENUES, EXPENSES
AND STATISTICS FOR WISCONSIN STEAM AND HOT WATER
HEATING UTILITIES
1979-1977

	1979	1978	1977
Operating Revenues	$ 8,995,665	$ 8,640,684	$ 7,738,026
Operation and Maintenance	6,507,928	5,681,602	5,449,618
Depreciation	645,550	618,566	567,532
Taxes	1,108,563	1,146,449	840,494
Total Operating Expenses	$ 8,262,041	$ 7,446,617	$ 6,857,644
Net Operating Revenues	$ 733,624	$ 1,194,067	$ 880,382
Number of Customers	753	780	796